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TUNA MANAGEMENT

HEARING

BEFORE THE

NATIONAL OCEAN POLICY STUDY

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

TUNA MANAGEMENT

JULY 20, 1989

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TUNA MANAGEMENT

THURSDAY, JULY 20, 1989

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
NATIONAL OCEAN POLICY STUDY,
Washington, DC.

The committee met at 2:05 p.m. in room SR-253, Russell Senate Office Building, Hon. Daniel K. Inouye presiding.

Staff members asssigned to this hearing: Penny Dalton and Mike Nussman, professional staff members; Bob Eisenbud and Earl Comstock, minority professional staff members.

OPENING STATEMENT BY SENATOR INOUYE

Senator INOUYE. This afternoon the National Ocean Policy Study revisits the issue of whether the United States should manage tuna resources within its 200-mile exclusive economic zone, the EEZ.

Presently section 102 of the Magnuson Act exempts tuna from domestic management. The United States is one of only two coastal nations in the world that does not unilaterally manage and conserve the tuna within its national waters. And so, this hearing will begin the process of gathering information to answer the question of whether circumstances have changed sufficiently to warrant a change in our tuna policy.

Accordingly, this committee is most fortunate to have an array of distinguished and knowledgeable witnesses representing various interests and viewpoints.

In deciding to exclude tuna from the management authority of the Magnuson Act in the past, Congress believed that as a highly migratory species tuna was best managed through international mechanisms such as the International Convention for the Conservation of Atlantic Tuna, the Inter-American Tropical Tuna Convention, and the South Pacific Tuna Treaty.

Although the Magnuson Act specifically excluded tuna, all the other highly migratory pelagics, including species of marlin, sailfish, swordfish, sharks, mahi mahi, wahoo and salmon were included.

Congress also presumed that there were few economically valuable tuna resources within 200 miles of national jurisdiction.

In the midseventies when Congress first considered the Magnuson Act, less than 10 percent of the U.S. tuna catch occurred in U.S. waters. There was no large domestic near-shore tuna fishery. In fact, less than 1 percent of domestic production came from within U.S. waters.

Additionally, 97 percent of the tuna for the canned tuna industry was caught in waters off foreign shores. As a result, Congress perceived little economic loss in allowing unlimited fishing of tuna within U.S. coastal waters.

At the same time, the U.S. could maintain open access for the U.S. distant water tuna fleet to fish within the EEZ's of other nations.

Subsequently, virtually all coastal nations declared jurisdiction over fisheries, including tuna within their 200-mile EEZ's. This significantly affected the ability of U.S. distant water fishing fleets to use their traditional fishing grounds.

In addition, with growing foreign competition, U.S. tuna companies relocated more canning operations to U.S. territories and invested in foreign facilities to take advantage of cheaper labor, lower taxes.

Further, U.S. coastal tuna fisheries emerged to meet the increasing demand for sashimi-quality fresh tuna, which commanded on the average seven times the price of canned tuna. In considering this issue in the past, we did not anticipate the development and expansion of domestic tuna fisheries.

Accordingly, we need to seriously consider the impact that excluding tuna has had on resource management, conservation, and allocation as a result of these numerous changes. There are approximately 8,000 commercial vessels today which catch tuna either part time or full time in the EEZ adjacent to the east coast, west coast, Hawaii, the Pacific island territories, the Gulf of Mexico and Caribbean island territories.

The domestic tuna fisheries have developed and grown at a remarkable rate. Their estimated catch value exceeds $100 million annually. In addition, annual expenditures on recreational tuna fishing may exceed $250 million.

Today thousands of fishermen and boats depend on the tuna stocks within our domestic waters for their livelihood and recreation. Domestic management and international management are not mutually exclusive.

In mid-June of 1988, President Reagan signed the implementing legislation for the South Pacific Regional Fisheries Treaty between the United States and 15 Pacific island nations. Pursuant thereto, the United States agreed to pay $12 million a year for 5 years in financial assistance and for tuna fishing rights within the EEZ's of these nations.

The South Pacific Tuna Treaty implicitly recognizes the jurisdiction of foreign nations over tuna within their EEZ's. The price to be paid also evidences an understanding on the part of the United States regarding the value of tuna stock within the coastal waters of these nations.

In one sense this treaty, a fishing access agreement, can be viewed as conflicting with our tuna policy at present. While we exert no jurisdiction or management over tuna in our domestic waters because we deem the species to be highly migratory, we pay a fee to fish in the waters of these Pacific nations. This payment on the part of the United States acknowledges ownership or control of tuna by these nations.

In another sense, the South Pacific Treaty can be looked upon as an example of how domestic management and international cooperation can coexist.

Interestingly, in the NOAA fishery management study of 1986, commissioned by the Administrator of NOAA, it is stated that the U.S. policy on the management of highly migratory species, has had unintended and severe resource management and political repercussions. Hence, the 1986 report recommended that the exclusion of tuna in the Magnuson Act be repealed.

The dramatic rise in the demand for tuna has been met by competing fisheries' interest and overstretched resources. The current tuna policy has prevented effective data collection to determine the full impact of increased demand on tuna stock.

There is considerable scientific uncertainty regarding the potential size of long-term sustainable yields for many tunas and associated species. Whether or not this committee decides to include tuna under the Magnuson Act, it is clear the resources must be expanded to assess tuna resources and better understand the interrelationship of tuna and their environment.

And so, today we will review the effectiveness of international management of tuna and the effect of current U.S. tuna policy on commercial, recreational, strategic and fisheries management interests. I look forward to hearing from our distinguished witnesses on these important issues.

Before proceeding, I am pleased to call upon my distinguished colleague from Alaska for his words of wisdom.

OPENING STATEMENT BY SENATOR STEVENS

Senator STEVENS. Mr. Chairman, I am pleased to be with you again, and I am delighted to see so many old friends in the audience including, I think, our first appearance here in a new capacity of our old friend, the former Commander in Chief of the Pacific.

I listened with interest to your statement. I am particularly interested in the impact of the driftnets on the tuna, and I will be looking forward to testimony on that because, as you know, the driftnets are now really the great marauders of the Pacific and are doing substantial damage to the fishery resources of the North Pacific. I am most interested to hear about the impact of the driftnets in the area of the tuna in the South Pacific area.

Thank you very much. I am pleased to be with you.

Senator INOUYE. I am pleased to recognize Senator Pressler.

OPENING STATEMENT BY SENATOR PRESSLER

Senator PRESSLER. Mr. Chairman, as I said a couple of years ago, I believe, at a hearing on this same subject, tuna is not the most burning issue in South Dakota, but we are all interested in a vital U.S. tuna industry. As consumers we all have an interest in it, not just the states involved directly, and so I am here to help out and to learn from my colleagues and the witnesses in any way I can.

Senator INOUYE. At this time I will insert the opening statements of Senators Hollings and Kerry in the record.

[The statements follow:]

Opening Statement by the Chairman

Good afternoon. The Committee and the National Ocean Policy Study have convened this hearing today to discuss the management of tuna fisheries. Our focus is on the status and trends in tuna fisheries throughout the Pacific, Atlantic and the Gulf of Mexico. The Committee will evaluate ongoing efforts to manage these fisheries and the effectiveness of existing international and domestic management systems. Both commercial and recreational fishermen will provide testimony on the reauthorization of tuna-related fisheries legislation and on possible amendments to give the Regional Fishery Management Councils authority to manage tuna fisheries in federal waters.

Tuna are found in all the temperate and tropical oceans of the world. They are powerful swimmers and voracious predators, migrating throughout the world oceans searching for food. Some may cross entire oceans several times during their life span, while others remain within the geographic area in which they were spawned.

Tuna stocks support major commercial and recreational fisheries and are among the most highly valued of marine resources. For some developing nations, they are a primary source of foreign exchange. Over the last two decades, world tuna landings have risen about 6% each year, and tuna fleets have also continued to grow. In light of the increasing fishing activity, we must invest in conservation and management systems to ensure that tuna populations can sustain the rising catch levels.

In the United States, despite foreign competition and rising costs, our high seas tuna fleet supports one of our largest and most important fishery-based industries. Tuna fishing and canning operations presently are estimated to employ about 20,000 persons in the United States. In 1988, Americans ate almost 600 million pounds of canned tuna, worth almost $1 billion. During the same period, the U.S. fleet landed 609 million pounds of tuna with an ex-vessel value of $381 million. The tuna fleet is the sole remaining U.S. distant-water fishery.

In addition, U.S. commercial fishermen are focusing increasing effort on tuna fishing in our 200-mile exclusive economic zone. Today, over 600 longline vessels fish for tuna along the Gulf and Atlantic coasts. While their catches are small in comparison to those of the distant-water fishery, the fish command a high price in the market. As a result, the coastal fishery now harvests over 22% of the total value of U.S. tuna landings.

Finally, tuna is a prized catch for our nation's 17 million marine sport fishermen. I understand that over 90% of the Atlantic bluefin tuna quota is caught by recreational anglers. Substantial numbers of other tuna species like yellowfin and bigeye are harvested by these fishermen as well.

Federal management authority over tuna has been a contentious issue since the initial consideration of the Magnuson Act in 1975. While there is consensus that international agreements are essential for effective management of highly migratory species, the debate has centered on the need for domestic management of tuna in the U.S. EEZ. In addition, most of this audience is well aware of the damage to our relations with the South Pacific nations as a result of conflicting tuna policies. The Committee will be interested to hear today about the effectiveness of the recent South Pacific Tuna Treaty in repairing that damage.

I want to thank Senator Inouye for presiding over this hearing, and I ask all my colleagues on the Committee to join in a thorough investigation of this pressing matter.

Opening Statement by Senator Kerry

Mr. Chairman, I appreciate this opportunity to express my hopes and concerns for the tuna management nationwide, and particularly for the growing fishery in the Atlantic. Effective management is critical to insure future growth for this very important fishery.

The Atlantic Ocean supports a thriving tuna fishery, based primarily on Atlantic bluefin tuna. In a recent report, National Marine Fisheries Service estimated that bluefin fishermen were paid more than $17 million for their catch in 1988. About 27,000 federal permits are currently issued to catch and sell bluefin. More than 9,000 of these are issued in Massachusetts, where tuna is a traditional fishery.

Bluefin is currently regulated by the International Convention for the Conservation of Atlantic Tunas (ICCAT). Under this international agreement, quotas were established for both U.S. and foreign fisheries. Improved tuna management may be gained by including tuna under the Magnuson Act, where it was previously excluded as a highly migratory species. However, there is concern that the Atlantic

Fishery Management Councils do not adequately represent all user groups and all eastern regions.

Today's hearing will examine current management practices and future alternatives. I look forward to the reauthorization process and to hearing all sides of this important issue.

Senator INOUYE. I am very pleased to call upon our friend from California, Senator Wilson.

STATEMENT OF HON. PETE WILSON, U.S. SENATOR FROM CALIFORNIA

Senator WILSON. Thank you, Mr. Chairman. I am privileged to sit with the committee as an ex officio member of the National Ocean Policy Study, and my interest is longstanding, and I think it is well known. I have a great concern for an endangered species, those who fish for and can tuna, particularly in the environs I represent.

Quite seriously, I think that the hearing is a very important one and that you are to be commended for conducting it. And I will be very interested to hear the opinions expressed on questions that really do relate quite directly to the survival of the industry, since it is consistent with the survival of the species and the good management of the fishery.

I am particularly interested in testimony that Mr. Felando and Mr. Joseph will offer. I am pleased that they are here, and I think we really do need to be concerned.

It seems to me that they will be able to make a pretty convincing case that the survival of the industry and the good management from a conservation standpoint of the fishery depend upon a kind of cooperation that is threatened by a rigid adherence to the 200-mile limit.

Thank you, Mr. Chairman.

Senator INOUYE. Thank you very much.

And now shall we proceed to the witnesses.

Our first witness is a very distinguished member of the House of Representatives representing American Samoa, the Honorable Eni Faleomavaega.

Congressman, it is a great pleasure having you with us, sir.

STATEMENT OF HON. ENI FALEOMAVAEGA, U.S. REPRESENTATIVE FROM AMERICAN SAMOA

Mr. FALEOMAVAEGA. Mr. Chairman, I want to express my appreciation for this opportunity given to me to testify before this distinguished committee.

Mr. Chairman, I want to take the opportunity to testify here today regarding a possible amendment to section 103 of the Magnuson Fisheries Conservation and Management Act and reauthorization of the Atlantic Tuna Conventions Act.

Earlier this year the United States tuna industry faced a tremendous challenge when the administration introduced several amendments to the Caribbean Basin Initiative Act that would have significantly eroded the diminishing competitive posture of the American tuna canneries located in Samoa and Puerto Rico.

On this particular issue the tuna industry and my office were unanimous in our opposition to what was clearly a major threat to

the economic survival of America's only tuna canning industries located in Samoa and Puerto Rico.

I might also note, Mr. Chairman, that approximately one third of the tuna consumed in the United States comes from American Samoa, and it is my understanding American Samoa is the second largest tuna canning industry in the world, second only to Puerto Rico.

The issue we face today is not as clearly defined. This is evidenced by the opposing views held by certain territorial leaders and the tuna canneries operating in Samoa and Puerto Rico.

This committee will hear considerable testimony presented by distinguished witnesses and like our distinguished Chairman, I am planning to listen to arguments from federal agencies, the tuna fishing industry and community leaders.

In my attempt to examine the impact of this complex and emotional issue I have had to review not only the economic aspects, but also the political ramifications of the issue at hand. It is political in the sense that the resources of the Pacific Ocean are shared by all the island countries and territories, even the United States in our Asian Pacific region.

Until recently the United States has treated the sovereignty of the Pacific island countries in a somewhat cavalier manner unbecoming of this great Nation of ours. Prior to the signing of the South Pacific Tuna Act of 1988 the United States had to take the position that the exclusive economic zones do not apply to tuna since it is considered a highly migratory species of fish. As a result, American tuna fishing boats were perceived as repeatedly violating the rights of several Pacific island governments by conducting purse seining fishing operations within their EEZ's.

As a result, the U.S. purse seiners were seized and fined. Our Government responded by imposing provisions of the Magnuson Act which authorizes an embargo against the island country which seized the vessels. This inevitably worsened U.S. relations with the traditionally pro-Western Pacific island countries.

The passage by Congress of the South Pacific Tuna Act of July 8, 1988 was seen as a positive step in improving and revitalizing relations with our Pacific island neighbors.

However, I am very concerned that a change in the longstanding U.S. juridical policy and the highly migratory nature of tuna, may result in doing harm to the American tuna canning industry in American Samoa. As you know, our tuna canning industry is the most important component of Samoa's private sector economy. It is the largest private sector employer in the territory and our leading export product to the United States.

The rationale behind the exclusion of tuna in the Magnuson Fisheries Conservation and Management Act was because they are a highly migratory species that some say could only be managed internationally. This U.S. position was an important cornerstone to the negotiations which resulted in the U.S. South Pacific Tuna Treaty with these island countries.

This treaty allows U.S. vessels access to approximately 10 million square miles of valuable land potential tuna fishing grounds. American tuna fishermen are now able to take advantage of this prime fishing area and then deliver their catch to Samoa's canner-

ies thereby making Samoa an indirect beneficiary to this regional treaty.

It is possible that if the United States were to assert authority management over tuna, the outcome could be a significant weakening of this treaty and other international management regimes would be damaged as well.

As I stated in the beginning, this is a complex issue whose outcome could have a significant effect on the welfare of the people of American Samoa, and I strongly suggest that we proceed with caution.

It is my sincere hope that before any decision is made, a thorough study of the possible impact this could have on Samoa's overall economy and just as important, the formulation of appropriate U.S. foreign policies relative to fisheries and related issues be conducted.

Mr. Chairman, this completes my statement, and I say again, I would be happy to answer any questions the members of the committee might have.

Senator INOUYE. Thank you very much, Congressman. Your participation will be most important in our deliberations, and I am certain I speak for my committee. Are there any questions?

Senator STEVENS. No, Mr. Chairman. It is nice to see you here.

Senator INOUYE. Thank you very much.

Now, it is my great pleasure to call upon an old friend, presently the Governor of American Samoa in Pago Pago, His Excellency Peter Tali Coleman.

STATEMENT OF HON. PETER TALI COLEMAN, GOVERNOR OF AMERICAN SAMOA, PAGO PAGO, AMERICAN SAMOA

Governor COLEMAN. Thank you, Mr. Chairman. It is certainly a privilege, Mr. Chairman and distinguished members of this committee, to appear before you regarding my testimony in favor of the inclusion of tuna under the Magnuson Fishery Conservation and Management Act.

My views on this issue are shaped by a lifetime spent as an islander seeking harmonious relationship with my fellow islanders among the Pacific community of nations and by my concern for the sea resources we will leave for future generations in our region.

My three fellow Governors of American flag Pacific Islands and I favor the inclusion of tuna under the Magnuson Act. We signed a resolution in March 1989, setting forth our position.

For me, the decisive factor was not the biological and economic evidence supporting the inclusion of tuna. Rather, the political events that are reshaping Pacific basin with the force of a tidal wave.

Most of our island neighbors are independent nations, and tuna are among the most important natural resources that we have. All of these island nations claim and have managed tuna within their exclusive economic zones.

The management of tuna is, indeed, an international issue in my part of the world. This committee will hear considerable testimony today on the status of international tuna management in other areas.

We are just beginning to see international agreements on tuna fishing rights in the central and western Pacific. The South Pacific Tuna Treaty has created good will in the region by setting up an umbrella agreement allowing the U.S. tuna fishing fleet rights in the exclusive economic zones of 13 independent island nations.

Prior to this treaty relationship between the United States and many island nations had deteriorated badly over the tuna fishing issue. U.S. tuna boats who were caught fishing without permits off some islands and were detained. The islands whose laws were broken sometimes found themselves being punished by the United States through trade embargoes. All the good will the United States had stored because of our role in World War II and was sealed with the blood of United States servicemen in that great war was dissipating because of our position on tuna.

Despite the good beginning made by the South Pacific Tuna Treaty, fishery management on an international basis remains primitive in the central and western Pacific. Nearly all Pacific Island nations have joined together in condemning the drift gill net fishing practices of Japanese, Korean, and Taiwanese fleets. Only the Republic of Korea is beginning to cooperate in stopping this extremely destructive and wasteful fishery which deploys thousands of miles of nets a day creating an enormous wall of death on the high seas.

I should like to point out to you where this gill net fishing has been taking place, up in the north there, in the northern Pacific, they have been fishing using gill nets there for the last 10 years. They have now fished out the resources there, right near Hawaii, the Hawaii area. They are now going down to the south Pacific near New Zealand and laying down about 21,000 miles of filament netting, the transparent netting that is so destructive to the marine resources of the Pacific that the whole Pacific Ocean marine resources are being completely endangered. And we feel very strongly politically.

The island countries themselves, I cannot speak for them, but knowing that they have just recently had a meeting of the Pacific Forum, they have condemned this gill netting, and they can see the effect of this gill netting as they see what is happening to this planet of ours. It is now the global concern for the protection of our environment. It is now the topic of determining the destiny of life on earth.

We have seen the forests in Brazil destroyed. We have seen the elephants—two nights ago I watched the tusks of 2,500 elephants in Africa that were killed by the poachers and were burned by the leader of that government to show that they mean business by trying to protect their resources, the animal life in Africa.

And the gill netting itself is part of this destruction that is moving all over this earth and without check. And unless we form strong stands and hold international agreements on the protection of these marine resources, our own children will be in danger of having something to eat, particularly all of us who live in the islands.

Long before the first Westerners sighted our islands, we lived in intimate association with the sea. The limited land area and de-

pendence on the ocean for food compel us to pay more attention than most people to our natural environment.

Little wonder that our ancient traditions cautioned against overusing marine resources. The spirit of our ancient beliefs is not very different from that spirit of the Magnuson Fishery Conservation and Management Act.

Our islands have accepted modern technology and have adopted many western way. But in some ways we are more dependent than ever on the fishery resources of the Pacific Ocean. I refer in particular to large-scale tuna fisheries which have developed in the central and western Pacific.

American Samoa is the home of two major tuna packers who purchase fish from the U.S. purse seiners and from foreign fleets. American Samoa is the main center of tuna processing in the world. Tuna canning is our largest private employer and our most important industry.

American Samoa's dependence on tuna is precisely the reason for my support of the inclusion of tuna under the Magnuson Act. We are long past the day when we can be sure that the ocean's natural resiliency would replenish fish population.

I want to be able to tell our children and grandchildren that tuna will continue to be able to provide jobs and income and only by including tuna under the act can we properly assess stocks and forecast tuna conservation and management needs.

The oceans are still a vast protein factory, but a reasonable analysis of this factory invokes an analogy to an automobile factory. The finished products which emerge from the assembly line can never exceed the sum total of the raw materials which are fed into the line at the beginning.

It would be a poor auto factory manufacturer who depleted his plant would produce 1,000 cars per day while ordering enough steel to produce only 500. That is roughly the situation in which we might find ourselves if we continue to defy logic by refusing to make tuna subject to management and scientific study under the Magnuson Act. Including tuna will help us keep our promises to future generations that they too will receive the benefits that fishing for tuna brings.

Everyone agrees that international cooperation is needed to manage tuna effectively. The disagreement is over how best to achieve international cooperation.

It is said that the best bait for catching fish is what tuna—is what the fish usually eat. This argument can also be made for including tuna under the Magnuson Act. Virtually all other nations claim jurisdiction over tuna by following suit, the United States would signal other nations, particularly in the central and western Pacific that we are using the right bait to gain their cooperation.

For some reason, however, the tuna inclusion issue is often framed in an either/or context. Either the Magnuson Act will be changed to support nation-by-nation jurisdiction, or it will continue to support international management of the resource. This could not be more wrong. The end is international tuna management while the means to that end is nation-by-nation jurisdiction over tuna.

Thirteen Pacific island nations acting through a regional framework provided by the Forum Fisheries Agency have taken the first step toward multilateral management of tuna fishing in the central and western Pacific. All of these nations unilaterally manage tuna within their respective 200-mile extended economic zones.

This did not prevent them from signing the South Pacific Tuna Treaty with the United States. By executing this treaty, the United States has recognized these countries' unilateral claim to tuna under a regional multilateral framework. Inclusion of tuna under the Magnuson Act is perfectly consistent with what the United States is already doing.

Inclusion of tuna in the Magnuson Act will not impede international management. In fact, it will smooth a way for international cooperation. With equal claims on tuna, we and our non-U.S. neighbors will find it easier to iron out fishing access agreements, share data bases, and collaborate on stock assessment and forecasting.

We all know the old saying that a chain is only as strong as it weakest link. The exclusion of tuna from the Magnuson Act is the weakest link in our country's fisheries policies for our part of the world. I urge this committee to correct this most serious problem.

Thank you very much, Mr. Chairman.

Senator INOUYE. Thank you very much, Governor. Is it your contention that the South Pacific Tuna Treaty in and of itself is not sufficient to properly manage tuna resources?

Governor COLEMAN. I think the question or the answer is much broader than the South Pacific Treaty. The history of the South Pacific treaties came about because the island countries established their own economic zones. These economic zones were not recognized by the United States, but then when these island countries started arresting these vessels, the U.S. vessels coming into their economic zone, then we were forced to set up these treaty arrangements. And, in my opinion, it would not affect it.

In fact, the most important factor here is the management of the resources in such a way that we can also—they are all intertwined, these elements that are involved, including the gill netting, and managing that resource, it is my contention that having an international agreement on management will be the answer, and it will not affect our own special treaties with the island countries.

Senator INOUYE. High officials of the tuna industry have suggested that any change in the U.S. tuna policy may well result in the movement of tuna processing operations out of American Samoa. Do you have anything to say to that?

Governor COLEMAN. Yes. I have watched—in fact, I witnessed the beginning of the tuna industry in American Samoa. It was about 35 years ago, and I was a young man, and I was then in government, and I have dealt with the tuna industries, I have many friends in the tuna industries, and I certainly respect their contribution and am grateful for their contribution to the economy of American Samoa.

I think at times the tuna industry was not concerned with—the tuna processing industry was not concerned with the supply of the tuna. They were concerned more with the cost of production, and even if we can bring all the tuna to American Samoa today, if the

cost will go up and the profit motive is much lessened, then these canneries will go away. They are already looking into other possibilities, and we allow them to do that because we recognize that is the life of any industry is the profit that a good return for the investors.

But as I see it, it will not affect our own operation. We do not only depend upon the purse seiners, we depend upon other fisheries, and I would like to say I am not against the fishing industry, the U.S. fishing industry. But we have had some problems with the fishing industry's attitude in the Pacific.

They used to go into these island countries and fish within economic zones. It caused so many international incidents where some of them were even called by the islanders as a bunch of bandits.

Now, I have many good friends in the fishing industry, but it is this type of thing that concerns me. It is the management of this tuna because when we look tied in with the gill netting the way it has destroyed the fish, resources being destroyed. We all have to arrive at some kind of management policy for tuna.

Senator INOUYE. Thank you very much.

Senator Stevens.

Senator STEVENS. Well, it is nice to see you again, my old friend. I welcome you back again, of course.

Are any of the drift net-caught tuna brought into American Samoa?

Governor COLEMAN. We have asked the canneries, and the canneries are cooperating. No tuna is being accepted.

We found out one or two tuna vessels that came in for repairs, and I have asked the cooperation of the ship repair facility to turn them way next time unless lives are endangered.

Senator STEVENS. You have not had a shortage in American Samoa, have you, as far as the American tuna fleet bringing tuna for your canneries?

Governor COLEMAN. No, sir. The supply, of course, fluctuates in different seasons, but there has not been any real shortage.

Senator STEVENS. Well, why is it that you feel the Magnuson Act application to tuna would somehow or another improve your situation? Do you feel that would give greater stability to your industry?

Governor COLEMAN. I would think so. The—particularly the conversation part of it because when we deal with the other methods of fishing, for instance, we came—the history of the fishing methods was we all started out with a pole, a bamboo pole. Then we went into long line, then we went into purse seining. Now, we are going into gill netting, and gill netting is the most destructive.

But I feel that if there is good management on the resources for the tuna, we really are protecting our own canneries.

Senator STEVENS. Well, knowing the history of the tuna industry, if we take such action to include tuna within our domestic law, do you not think that will encourage the Central and South American and Asian countries to take similar action and lead to just total fractionation of the management of tuna?

We now have an international regime, and we have a specific treaty. I do not know why we should fractionate or divide the management of tuna by arbitrary 200-mile limits. I know of no area

that can claim the tuna as originated within a 200-mile limit. It is totally a migratory species.

Governor COLEMAN. Well, the island countries are claiming that tuna is not altogether a migratory species. They have found through biological tests that there are some tuna that stay within the areas. Now, they may be migratory in the sense they move from one area to the other at different ages, but within the same region. That is what some of the scientists are saying at the present time.

But, you see, there is a contradiction in the selling of the tuna to the United States We have, for instance, canneries in Bangkok, Thailand are using this low-cost labor, and so when we permit these as we are doing now, we permit this tuna to be brought into the United States at much lower prices, these are the real dangers, really, to our cannery operation in American Samoa. And even though we realize that there is a higher cost of labor in American Samoa, but we also recognize the productivity of the Samoan worker also helps keep the price of tuna stable.

Senator STEVENS. Thank you very much. Thank you, Mr. Chairman.

Senator INOUYE. Thank you, Governor. We appreciate it.

And now it is my great pleasure and honor to call upon a man who has served this nation with great distinction, great honor and much effectiveness. Until recently he was the Commander in Chief of the Pacific, the CINCPAC, Adm. Ronald J. Hayes, U.S. Navy, retired.

He is here in his capacity as president of the Pacific International Center for High Technology Research.

Admiral, it is good to see you, sir.

STATEMENT OF ADM. RONALD J. HAYS, PRESIDENT, PACIFIC INTERNATIONAL CENTER FOR HIGH TECHNOLOGY RESEARCH

Admiral HAYS. Thank you very much, Mr. Chairman, Senator Stevens, Senator Breaux.

Sir, I have a very short——

Senator BREAUX. Mr. Chairman, if I could make a comment, I also want to join in welcoming Admiral Hays. He is from the metropolitan area of Urania, Louisiana.

Senator INOUYE. Urania.

Senator BREAUX. Urania. That is what I said when I first heard about it. Back when I was in the House we were delighted. The question was where in the hell is Urania—near Olla, is it not?

Admiral HAYS. Sir, I explained the location of Urania by saying it is equidistant between Olla and Tullos.

Senator INOUYE. Where is Olla and Tullos?

Senator BREAUX. East of Hawaii. It is in Louisiana. We are just delighted. He is an outstanding product of Louisiana, and we are delighted to have him back again.

Admiral HAYS. Mr. Chairman, I have a short verbal statement and also a written statement which I would propose for the record if that is satisfactory.

Senator INOUYE. All witnesses can be assured that their prepared statements will be made a part of the record.

Admiral HAYS. Sir, in my new incarnation I am the president and chief executive officer of Pacific International Center for High technology Research, a nonprofit Hawaii-based corporation that is deeply involved in renewable energy systems.

I would like to thank you very much for inviting me back to express my views on the matter of the Magnuson Act.

My appearance here today is, of course, not as the president of PICHTR nor as a fisheries expert, but rather as the former Commander in Chief of the Pacific Forces. In that capacity my duties included readiness and preparedness of the U.S. forces in the Pacific for war fighting, and it also included a responsibility for good relationships between the United States and our friends and allies in the Pacific.

Now, the U.S. tuna policies in the Pacific caused great difficulty in the fulfillment of the latter responsibility. The U.S. tuna policy which allowed our own tuna fishing boats to enter the exclusive economic zones of other countries was considered by the other countries as a violation, a fundamental violation of sovereign rights, and it was also viewed as a powerful nation bullying a much smaller nation without a capacity to do much about it.

Now, I believe that in this day and age we cannot go it alone. It is important to have good friends and good allies. We will maintain good friends and allies as we have today in the Pacific, only if we are sensitive to their hopes and aspirations and their needs.

We have not done a very good job in the past insofar as that kind of sensitivity is concerned, and I saw during my 3-year tour as Commander in Chief of Pacific Forces an erosion of the reservoir of very good will that we enjoyed in the South Pacific. And, for the most part, the erosion could be tied to our tuna policy.

There was widespread criticism wherever I went. I always, without exception, received criticisms from the people I visited in that region about the U.S. tuna policy. The environment that developed from our practices really opened the door for the Soviet Union in the South Pacific, first in Kiribati and then in Vanuatu.

Now, it can be argued how much of a threat the Soviets in the South Pacific really is. But I think there cannot be any argument about the fact that Soviet fisherman have multimissions, including such things as intelligence collection, and there cannot be very much disagreement with the conclusion that we would be better off from a national security perspective if the Soviets were not in that region.

In addressing this dilemma which developed in the mideighties, at CINCPAC we developed a strategy that we called the peacetime strategy, and the peacetime strategy asked the question "What can we do with available military resources to improve our position for war fighting and to improve the Nation's security interest in a given region."

Now, as we developed that strategy, the focus was, of course, on security matters, but the reality is that you cannot divorce security from economic and political considerations and thus the focus within CINCPAC at that time on tuna.

Happily, there were ongoing negotiations in '85 and '86 that led to what I believe to be a very satisfactory treaty which averted a crisis of confidence for this nation in the South Pacific.

It is a fact that common practice and observations eventually lead to international laws. That is sort of the way international law is developed. Coastal States, it seems to me, increasingly have the expectation that they will regulate affairs within their exclusive economic zones, which they consider to be sovereign territory.

The only uncommon thing that they are faced with today, so far as that philosophy is concerned, seems to be the Magnuson Act exclusion of tuna.

I believe from a security perspective, so far as our national security interests are concerned, that we would be far better off if we modified the Magnuson Act to include tuna within its provisions.

Thank you, Mr. Chairman.

[The statement follows:]

STATEMENT OF ADM. RONALD J. HAYS, USN (RET.) PRESIDENT AND CHIEF EXECUTIVE OFFICER, THE PACIFIC INTERNATIONAL CENTER FOR HIGH TECHNOLOGY RESEARCH

Good afternoon Mr. Chairman, and members of the Committee.

I am Ronald J. Hays, President and Chief Executive Officer of the Pacific International Center for High Technology Research (PICHTR)—an international not-for-profit corporation located in Hawaii. Applied research and technology transfer are the missions of the organization.

I appear before you today not as the President of PICHTR, but as the former Commander in Chief U.S. Pacific Forces (USCINCPAC), a unified command with headquarters in Pearl Harbor, Hawaii. I served as USCINCPAC for three years, from September 1985 to September 1988. The assignment as the nation's senior military officer in that dynamic, rapidly changing part of the world was the finest of my career. My responsibilities were to maintain a high state of readiness of our own forces and to nurture relationships with friends and allies in support of our national security interests. It was this latter responsibility that exposed me to criticism about our tuna policies from the day of arrival in Hawaii, even before I had the chance to relieve my predecessor, Admiral Bill Crowe, currently the Chairman of the Joint Chiefs of Staff. Visitors from the South Pacific used the change of command ceremony to unload upon the incoming USCINCPAC.

I am grateful that you have invited me to testify before this distinguished committee about the impact of tuna policies in the Pacific as seen from the security perspective. I will restrict my remarks to the period of my command tour and to security interest.

Whether the topic is security, economics or politics, no nation can go it alone in this complex world today. Friends and allies are needed. Fortunately, we have them in the Pacific but they can't be taken for granted. It has been said that among nations, there are no permanent allies, only permanent interest. Unless we are sensitive to our allies' interest we will lose them as friends and allies. In the South Pacific, the vast reservoir of goodwill for the United States that dated back to World War II, was falling victim to U.S. tuna policy during the mid-eighties. The impact was far beyond the boundaries of the island nations directly involved. Major allies such as Australia looked at our tuna policy with disdain. The often heard question was, "How can a powerful nation like the United States steal the fish of poor countries whose only commercial resources are coconut and fish?" The question also highlights the fact that the issue is not between the island nations and the tuna industry but rather, between the island nations and the United States.

The tuna policy, along with declining foreign assistance, were the two major distractors from the Pacific Command's "Peacetime Strategy." The peacetime strategy addresses the question of best uses of military assets in peacetime to enhance our national security, for peace or war. The core element of the strategy was mutually beneficial, cooperative relations between the United States and the nations of the Pacific. The focus was on security matters but it is impossible to isolate national security from economic and diplomatic issues. Thus USCINCPAC's interest in United States tuna policy.

With your permission, I would like to recap briefly my observations as USCINCPAC. The year 1985 is important because of the wide spread criticism the U.S. was receiving throughout the Pacific. It was only the United States that violated Pacific Islands sovereign rights. The uproar led to intensive negotiations between the U.S. and most of the Pacific Island countries in 1985 and 1986. Fortunately, the effort led

to a treaty in April 1987 between the United States and twelve Pacific Island nations. Later, three additional countries joined the treaty which allows U.S. tuna purse seiners to fish, under specified conditions, in the exclusive economic zones (EEZ's) of signatory countries. The agreement removes from contention some ten million square miles of ocean area.

Yet, the conflict was not over. In May 1987 before the treaty was ratified, Kiribati apprehended a U.S. flag seiner in its EEZ. The incident reinforced a commonly held perception that the United States was a bully with indifference to sovereign rights. The fact that the U.S. seiner was operating in accordance with U.S. law mattered not one iota. In the South Pacific, the law is generally rejected along with harsh criticism of the U.S.

Another alarming aspect of the crisis that developed during the mid-eighties was the search by the Islanders for alternatives that included the USSR. Ambassador Dalrymple of Australia highlighted the problem to the World Affairs Council in February 1986 when he said in a major speech, ". . . for the first time the Soviet Union has negotiated a fisheries agreement with a small Pacific country and for the first time, 16 Soviet Union fishing vessels are stationed south of Hawaii directly on the principal route of communications between the United States and Australia." The Soviet interest in the South Pacific continues to grow.

First there was agreement with Kiribati and then with Vanuatu. The agreements were for one year and fortunately neither has been renewed as of this date. I believe the dispute with the U.S. over the tuna policy had as much to do with the initial Soviet successes in the South Pacific, as dispute resolution through the recent treaty had to do with Soviet failure to renew their agreements.

It is commonly accepted that Soviet fishing fleets have a dual mission that includes intelligence collection. In this era of change in the Soviet Union, one can argue about the risk associated with Soviet fishing fleets operating routinely in the South Pacific but most can agree that security and stability are best served by their absence.

A genuine crisis of confidence in the U.S. was contained in 1988 when Preident Reagan signed the implementing legislation into law as the South Pacific Tuna Act of 1988. I left USCINCPAC in September 1988 and I'm told that the actual regulations of the treaty went into effect and implementation has gone reasonably well.

Common international behavior becomes, in time, international law. The Magnuson Act and its exclusion of tuna is uncommon. To the contrary, coastal states' regulation of fishing, including tuna, seems to have become standard international practice. In the case of the South Pacific Tuna Act of 1988, the U.S. appears to have given in to international pressure, and acted contrary to its own tuna policy. As a former USCINCPAC and concerned citizen, I'm delighted that it did. The long term best interests of the United States have been served.

The terms of the treaty are finite and at its expiration five years hence, there cannot be a return to our "old" ways. If this is reality, the sensible course of action from the perspective of national security is to modify now the provisions of the Magnuson Act to include tuna. I recommend that this action be taken to reassure our friends thoughout the Pacific.

Thank you Mr. Chairman.

Senator INOUYE. Thank you very much, Admiral.

It is rather refreshing to have the highest commander in the Pacific suggest that it takes much more than just security to serve the best interest of our country, and so your testimony on being sensitive to concerns of other nations on matters such as tuna is well taken. I can assure you that your prepared statement will be very carefully studied and considered, sir.

Senator STEVENS. Thank you very much. The admiral has expressed his point of view to me once before when I was in Hawaii, and I recall it very well, and I am delighted to see you, Mr. Chairman. I am sorry to tell you I have a series of conferences growing out of that hearing we just finished, which was 4 hours long concerning the oil spill disaster in my State, and I am going to have to leave. I appreciate the opportunity to be here while you were here, Admiral, and to the others, I am sorry I am going to have to leave.

Senator INOUYE. Thank you very much, Admiral.

Now, I am pleased to call upon the Deputy Assistant Secretary for Oceans and Fisheries Affairs of the Department of State, the Honorable Edward E. Wolfe, Jr. Secretary Wolfe will be accompanied by Mr. Carmen Blondin, Deputy Assistant Secretary of Commerce for International Interests of the National Oceanic and Atmospheric Administration.

STATEMENT OF EDWARD E. WOLFE, JR., DEPUTY ASSISTANT SECRETARY FOR OCEANS AND FISHERIES AFFAIRS, DEPARTMENT OF STATE, ACCOMPANIED BY CARMEN BLONDIN, DEPUTY ASSISTANT SECRETARY OF COMMERCE FOR INTERNATIONAL INTERESTS, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Mr. WOLFE. Thank you, Senator Inouye.

I have a rather lengthy statement, Mr. Chairman, and just for the record, as you suggested earlier, I would like to submit it in its entirety.

Senator INOUYE. Without objection, your statement will be made a part of the record, sir.

Mr. WOLFE. I will summarize hopefully within the next 5 minutes and would be more than welcome to answer any questions you or other members of the committee have.

As you are aware, Mr. Chairman, the Department of State has a long history spanning several decades of close involvement in international efforts to conserve and manage highly migratory tuna resources all over the world.

I have fortunately or unfortunately participated in this type of exercise, for a number of years. I am aware, as you are, of the emotionalism involved or the sensitivity, and I will certainly keep that in consideration as I move through my remarks, some of which may not be totally acceptable to the committee or to members of the audience.

There has been reference to the South Pacific Tuna Treaty by, I believe, most everyone that has testified today, certainly my friend Admiral Hays. I think we all can agree that the South Pacific Tuna Treaty, to date, has been a success and continues to be a success. I do not think anyone can question this.

I was part of this negotiation during the periods 1984 to 1986, and I think I can tell you unequivocally that it is my position without the tuna juridical position——

Senator INOUYE. Mr. Secretary, can I be excused for just 2 minutes. There is an urgent call. Thank you, sir.

[Recess.]

Senator INOUYE. Please proceed, sir.

Mr. WOLFE. Thank you, Mr. Chairman.

As I was saying, I participated in the South Pacific Tuna Treaty process as the U.S. negotiator, and it is my position that without the tuna juridical position and the corresponding embargo provisions of the Magnuson Act that that treaty, which I believe your body passed something like 87 to nothing would not be in force today.

My friend Admiral Hays, who held a party for the Pacific Island states, all 16 of the Pacific Island states delegation and the U.S.

delegation, at his residence, has made valid points about confrontation between the United States and a number of the Pacific Island states in the past. They existed. No one is attempting to deny that.

But, again, I would submit to you that without the U.S. position on tuna as it is today, we would not have the agreement and we would not have the relations that we have today in the South Pacific.

My responsibility also includes not just fisheries, but I certainly wear a national security hat in terms of such interest in the South Pacific as navigation and overflight issues, and I would just point out again that I feel the U.S. position was a very important element in achieving the success of the treaty.

Our involvement at the State Department in international tuna issues originates from two principal factors, the first is our involvement because of foreign policy, and I believe very strongly it is important for us to negotiate agreements with other countries regarding activities of the U.S. fleet to avoid these very foreign policy problems that have been alluded to today.

The second factor is that the United States has a large and economically valuable tuna industry which is very much a part of the international fisheries world. Obviously, not just in the South Pacific, but in the Eastern Pacific Ocean and the Atlantic. The U.S. tuna industry continues to be one of the nation's most valuable fishing industries, and the U.S. Government has an interest in maintaining a strong U.S. fishery.

It is important for us to be engaged in the international efforts to conserve and manage tuna fisheries in which our fishermen are involved and try to establish reasonable and equitable arrangements for access to these fisheries resources for our fishermen.

Very, very briefly, Mr. Chairman, I would just take 30 seconds or so and describe to you negotiations on tuna in which the Department of State is involved. I will not go into major detail.

You are aware that we have concluded the agreement with the 16 countries that sets forth the terms and conditions for access for our fleet to some 10 million square miles of ocean in the South Pacific. The Congress passed this agreement and it entered into force in 1988.

I would point out, Mr. Chairman, that in that agreement, we, the United States, do not recognize the jurisdiction of the Pacific Island states, nor do the islands recognize the U.S. jurisdiction. There is a nonprejudicial clause in the agreement which protects all of the countries involved and our separate juridical positions.

I would reiterate that the successful conclusion of this treaty was, in the opinion of the Department of State, one of the major successes in international fisheries in recent years, not to mention foreign policy. It resolved admittedly, a major foreign policy irritant for the United States, and it has laid the groundwork for excellent relations, long term, not just for fisheries, but I think other bilateral relations with our friends in the South Pacific. For example, and I am sorry, Senator Stevens is not here, I would point out to the committee that recently during a meeting in Suva F'ji on driftnet fishing the Forum Fisheries Agency called for a temporary moratorium on all driftnet fishing in the South Pacific until a management regime come into place. The United States, for the

first time in my memory, was a major part of that effort with the South Pacific states, and agreed with them and supported that call for a temporary moratorium.

We are involved in negotiations in the eastern Pacific with Central American countries, most recently Mexico. We hope to begin negotiations in earnest with Mexico and other countries for some type of multilateral regime. I will not go into detail about the international organizations we are involved in. I am sure the chairman is aware of the Inter-American Tropical Tuna Commission and the International Commission for the Conservation of Atlantic Tunas.

I would point out since we feel as strongly as we do, the State Department, that is, about international management and international cooperation and international conservation that we certainly would not rule that type of organization, an IATTC or an ICCAT or IATTC or something like that for the South Pacific. We could look to something like this in the long run.

The principal reason, Mr. Chairman, why we believe tuna is the most internationally oriented fishery is due to the highly migratory nature of the resource. I do not think the scientific fact can be overemphasized.

We are aware that in the eastern Pacific Ocean the yellowfin tuna resources travel throughout the 200-mile zones of nearly a dozen nations and thousands of miles out to sea in the western Pacific. We have similar data regarding stock migration patterns through many different countries.

Having said that, the fact that tuna resources are highly migratory does not mean that coast countries, including the United States do not have local fisheries for tuna or a special interest in the tuna fisheries which do incur inside the 200-mile zone.

It does mean, however, that stocks cannot be managed or conserved by any single country because of the highly migratory nature I described. A coastal state could manage tuna if the concept of management is used in its broadest sense to regulate the activities of fishermen and fishing vessels, but effective conservation measures for tuna are impossible for one country for a single coastal nation.

In fact, I am not aware of any coastal nation in the world that has ever attempted to—maybe attempted, but not successfully—to implement unilateral conversation measures for tuna.

It is for this reason, Mr. Chairman, that the Department of State does not support any change in the Magnuson Act to include jurisdiction over tuna within our zone. The lack of extended jurisdiction over tuna is consistent with our view of the scientific realities of the situation.

In any case, even if this view represents a minority opinion around the world, that does not mean that it is not a correct position or that it should not be the U.S. position.

A final point to be made on the question of extended jurisdiction is that there are virtually no foreign fisheries for tuna in the U.S. zone today. There have been no foreign tuna fisheries for a number of years in the U.S. zone, the Gulf of Mexico, the Caribbean, the Pacific or the western Pacific.

Furthermore, we do not believe an effective case can be made that our position on tuna has seriously impacted U.S. management efforts over billfish or other species in our zone over which we exercise jurisdiction.

In our view, the argument over tuna management in the U.S. zone does not involve a conservation issue or a foreign fishing problem issue, but is rather a domestic user group involving the competing interests of recreational and local commercial U.S. fishermen.

Last year, Mr. Chairman, we conducted a review of U.S. tuna policy, an internal review within the Department of State. We did this with particular emphasis on the effect of this policy on U.S. foreign policy interests. We concluded that foreign policy problems associated with the U.S. tuna policy mainly arises as a result of the trade embargoes we imposed pursuant to U.S. law.

This is one aspect of the Magnuson Act which we would like to see changed. Let me clarify that.

Section 205 of the act provides for what is essentially a mandatory embargo on the fisheries products of any nation which seizes a U.S. vessel because of a claim of jurisdiction not recognized by the United States.

We would like to suggest to the committee that Congress consider modifying section 205; that is, the mandatory embargo provision, to make the imposition of the embargo discretionary rather than mandatory.

The embargo has been an effective tool in our negotiations, as I pointed out earlier. We would like to have the discretion when it is in the Nation's best interest to use this tool. Sometimes it has not been in our best interest to use this tool, and we have had to use the tool anyway because of this mandatory nature.

The Fishermen's Protective Act is another element of our worldwide tuna policy which the committee has asked us to address. My statement is replete in terms of what we would like to do with that particular provision. One aspect of the act which the department is opposed to is section 5, which requires us to seek reimbursement for compensated claims from the nation which seized the vessel in question. I will not go into the detail and the rationale for that. It is in my written statement, Mr. Chairman.

We are convinced the Fishermen's Protective Act needs to be rewritten and modified. We would be interested in working with Congress and the U.S. industry to explore what might be possible.

However, this effort could take some time to complete, and so we believe that the act which, as you know, expires in October, should be extended for one more year in its present form. Since there have been few vessel seizures within recent years, we believe that the practical consequences of a 1-year extension would be minimal.

Finally, Mr. Chairman, you have asked for our comments regarding reauthorization of the Atlantic Tuna Conventions Act. We believe the International Convention for the Conservation of Atlantic Tunas has been an effective international management organization, and we support the reauthorization of the act.

With regard to the reauthorization of the Central Western South Pacific Fisheries Development Act, this is primarily the responsi-

bility of the Department of Commerce, and I would defer to my colleage, Mr. Blondin, in that regard.

That concludes my testimony, Mr. Chairman. I am happy to respond or attempt to respond to any questions you may have.

[The statement follows:]

TESTIMONY OF

AMBASSADOR EDWARD E. WOLFE
DEPUTY ASSISTANT SECRETARY
BUREAU OF OCEANS AND INTERNATIONAL
ENVIRONMENTAL AND SCIENTIFIC AFFAIRS
DEPARTMENT OF STATE

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND
TRANSPORTATION
UNITED STATES SENATE

JULY 20, 1989

Mr. Chairman and Members of the Committee:

I am pleased to have the opportunity to be here today to discuss U.S. tuna policy. The Department of State has a long history, spanning several decades, of close involvement in international efforts to conserve and manage highly migratory tuna resources all over the world.

The involvement of the Department of State in international tuna issues originates from two principal factors. The first is that the Department is involved in international tuna issues because of our foreign policy interests. As you can appreciate, it is important for us to negotiate agreements with other countries regarding the

activities of the U.S. fleet to avoid foreign policy problems which can result in the absence of agreements.

The second factor is that the United States has a large and economically valuable tuna industry which is very much a part of the international fisheries world. The U.S. tuna fleet, which is the second largest in the world, fishes extensively in vast areas of the eastern tropical Pacific Ocean and the South Pacific Ocean. In the Atlantic, there is an expanding U.S. commercial tuna fishery which operates in both U.S. and international waters. The U.S. tuna industry continues to be one of the nation's most valuable fishing industries and the United States has an interest in maintaining a strong U.S. fishery. It is important for us to be engaged in international efforts to conserve and manage the tuna fisheries in which U.S. fishermen are involved, and to try to establish reasonable and equitable arrangements for access to these fisheries resources for U.S. fishermen.

I would like to take a few minutes, Mr. Chairman, to describe briefly for you the status of the international agreements and negotiations on tuna in which the U.S. is involved. In the South Pacific, where approximately one-half of the U.S. distant water tuna fleet fishes, as the

Chairman is aware we have concluded a treaty with sixteen Pacific Island States which sets forth the terms and conditions for access by U.S. vessels to a 10 million square mile area of the South Pacific Ocean. As you know, Mr. Chairman, the Congress passed implementing legislation for this five-year agreement last year, and the treaty entered into force on June 15, 1988. I will not attempt to elaborate the details of this complex agreement today, as this has been done during other hearings, but I would like to reiterate that the successful conclusion of this treaty was one of the Department of State's major successes in international fisheries in recent years. The treaty resolved a difficult foreign policy problem for the United States and has laid the groundwork for an excellent long-term fisheries relationship between the United States and the South Pacific Island nations.

In the eastern Pacific, since the passage of the Magnuson Fishery Conservation and Management Act (MFCMA), the U.S. has been involved in several negotiating efforts to create a broadly-based conservation and management organization for the tuna fisheries of the region. These efforts have not, to date, been successful. However, we recently entered into discussions with Mexico which hopefully will lead to a multilateral regional agreement.

In the meantime, the Inter-American Tropical Tuna Commission continues to operate as an effective scientific organization responsible for studying and monitoring the status of the tuna stocks in the eastern tropical Pacific Ocean. The latest reports from the Commission indicate that the tuna stocks of the region are in a very healthy condition.

In the Atlantic, there is a growing U.S. commercial longline fishery for tuna which operates both within and beyond the U.S. Exclusive Economic Zone (EEZ), and in past years our distant water purse seine fleet has fished in the eastern Atlantic off the coast of Africa. The U.S. is an active member of the International Commission for the Conservation of Atlantic Tunas, which is responsible for the conservation and management of the highly migratory resources of the Atlantic Ocean.

The U.S. is also an active participant in the work of Indian Ocean Fisheries Commission and the Indo-Pacific Fisheries Commission, which are primarily concerned with tuna fisheries, as well as in the work of other international bodies and groups involved with tuna science and management.

The principal reason, Mr. Chairman, why tuna is the most internationally oriented fishery in the world is due to the highly migratory nature of the resource. This scientific fact cannot be over-emphasized, and although it is a widely known truth and generally accepted around the world, it warrants repeating because of the arguments advanced by some that tuna is more of a coastally-oriented species than has generally been thought to be the case. These arguments have no basis in fact and fly in the face of the documented scientific evidence produced by all of the international tuna organizations and supported by the world's leading tuna scientists. For example, in the eastern Pacific Ocean, the yellowfin tuna resources travel through the 200-mile zones of nearly a dozen nations and thousands of miles out to sea. The regional skipjack stocks, which spawn in the central Pacific Ocean, behave in a similar fashion. Bluefin tuna cross the entire ocean from Japan to the coast of North America. In the Western Pacific, the best scientific evidence available indicates that the tuna stocks are widely dispersed over a vast area which includes the 200 mile zones of many nations. The situation is similar in the Atlantic, where it is clear that all of the tuna stocks migrate great distances throughout the ocean and are not resident to the coastal areas of any particular nation.

The fact that tuna resources are highly migratory does not mean that coastal countries, including the United States, do not have local fisheries for tuna or a special interest in the tuna fisheries which do occur inside 200 miles. It does, however, mean that the stocks cannot be managed or conserved by any single country. A coastal state could manage tuna if the concept of management is used in its broadest sense, to regulate the activities of fishermen and fishing vessels, but effective conservation measures for tuna are impossible for a single coastal nation. We are not aware of any coastal country in the world which has even attempted to implement unilateral conservation measures for tuna.

It is for this reason, Mr. Chairman, that the Department of States does not support any change in the MFCMA to include jurisdiction over tuna within the U.S. EEZ. The lack of extended jurisdiction over tuna is consistent with our view of the scientific realities of the situation. And contrary to what one often hears on this subject, the U.S. is not completely alone in its view. Neither Japan nor Korea includes jurisdiction over tuna within their 200-mile claims, and together with the United States, these countries account for the majority of the world's tuna catch. In any case, even if this view represents a minority opinion around

the world, that does not mean that it is not a correct position or that it should not be the U.S. position.

We recognize that extended jurisdiction over tuna is not necessarily inconsistent with international management of tuna. It is our belief, however, that coastal state jurisdiction over tuna has the effect of making international management more difficult. Our observation has been that coastal states with extended jurisdiction over tuna tend to approach international management with a more inflexible national position which makes it more difficult to achieve the compromises necessary for effective international management.

A final point to be made on this question of extended U.S. jurisdiction is that there are virtually no foreign fisheries for tuna in the U.S. zone. In our Atlantic EEZ, for the past several years, two or three Japanese longliners have fished, under stringently regulated conditions. There have been no foreign tuna fisheries for a number of years in the U.S. zone in the Gulf of Mexico, Caribbean, Pacific or Western Pacific. Furthermore, we do not believe an effective case can be made that our position on tuna has seriously impacted U.S. management efforts over billfish or other species in our zone over which we exercise

jurisdiction. In our view, the argument over tuna management in the U.S. zone does not involve a conservation issue or a foreign fishing problem, but rather is a domestic user-group question involving the competing interests of recreational and local commercial U.S. fishermen.

Mr. Chairman, last year the Department conducted a review of U.S. tuna policy, with particular emphasis on the effect of this policy on U.S. foreign policy interests. It was concluded that the foreign policy problems associated with U.S. tuna policy mainly arise as a result of trade embargoes we impose pursuant to U.S. law. This is one aspect of the MFCMA which the Department of State would like to see changed. Section 205 of the Act provides for what is essentially a mandatory embargo on the fisheries products of any nation which seizes a U.S. vessel because of a claim of jurisdiction not recognized by the U.S. Since the passage of the MFCMA, the U.S. has put into place a number of such embargoes as a result of tuna vessel seizures. These embargoes often cause difficult foreign policy problems for the United States, and sometimes are even counter-productive to the interests of the U.S. tuna industry. For this reason, Mr. Chairman, we would like to suggest that the Congress consider modifying Section 205 to make the imposition of the embargo discretionary rather than mandatory.

One example of when the mandatory embargo provisions of Section 205 were contrary to U.S. interests was the imposition a few years ago of a tuna embargo against the Solomon Islands as a result of a vessel seizure by that country. This occurred in the middle of our sensitive and complicated negotiations with 16 Pacific Island countries regarding access for the U.S. tuna fleet. The other Pacific Island nations stood by the Solomon Islands in opposition to the embargo, and if we had not found a way to remove it, the entire negotiating process would have been disrupted or even terminated.

In the eastern Pacific Ocean, another example is the imposition of a tuna embargo against Costa Rica at a time when we were working with that government to obtain its ratification of the Eastern Pacific Ocean Tuna Fishing Agreement. Again, because of the timing and circumstances involved, it was counterproductive for the U.S. to be forced to embargo Costa Rica.

The Fisherman's Protective Act (FPA) is another element of our worldwide tuna policy which the Committee has asked us to address. The Act involves elements of foreign policy, international fisheries relations, and domestic budgetary questions. We believe that there have been a number of

changes in the international fisheries world since the Act was first passed, and that it is time to take a hard look at the way in which the Act should operate in the future. One aspect of the Act to which the Department is opposed is the continuation of Section 5 of the Act which requires us to seek reimbursement for compensated claims from the nation which seized the vessel in question. No country has ever seriously considered such a reimbursement, and the steps which must be taken because of Section 5 are counter-productive and harmful to U.S. foreign policy and fisheries interests.

In short, Mr. Chairman, we are convinced that the FPA needs to be re-written and modified. We would be interested in working with the Congress and the fishing industry to explore what might be possible. This effort could take some time to complete, so we believe that the FPA, which expires in October, should be extended for one more year in its present form. There have been few vessel seizures in the waters off Latin America for several years, and there should be no claims arising from seizures in the South Pacific for the forseeable future as a result of the regional treaty, so we believe that the practical consequences of continuing the Act will be minimal.

The Committee has asked that we comment on the re-authorization of the Atlantic Tunas Conservation Act, which implements the Convention establishing the International Commission for the Conservation of Atlantic Tunas (ICCAT). We believe that ICCAT has been an effective international management organization for tuna, and we support the reauthorization of the Act. In our view, the ICCAT conservation program for bluefin tuna is a good example of the importance of international management of tuna.

The Atlantic bluefin stock is fished under strict conservation controls through ICCAT covering the full range of the stock, which migrates widely throughout the Atlantic Ocean. As a result of the ICCAT program, the Japanese catches of western Atlantic bluefin have been reduced some 90 percent from previous levels. Without the ICCAT measures this would not have been possible, and nor would it have been possible to accomplish this through unilateral coastal state measures. Unilateral measures by the U.S. could have eliminated the Japanese catches of tuna in our zone, but the same level of take, or even increased catches, from the same stock could easily have been made by vessels fishing beyond 200 miles. We look forward to continuing to work through

ICCAT on bluefin tuna conservation as well as on the effective international conservation and management of other highly migratory species.

The Committee has also asked us to comment on the re-authorization of the Central, Western, and South Pacific Fisheies Development Act. The implementation of this Act is primarily the responsibility of the Department of Commerce, and we believe it would be more appropriate for the Commerce Department to comment on any legislation to reauthorize this Act.

Thank you, Mr. Chairman, for the opportunity to appear before the Committee today to present our views on U.S. tuna policy. I would be pleased to try to answer any questions which your or other members of the Committee may have.

Senator INOUYE. Thank you very much. Mr. Ambassador, is it your contention that international management and conservation of tuna in the Pacific has worked?

Mr. WOLFE. It is my belief, Mr. Chairman, that presently I am not aware of international conservation efforts by way of an organization in the South Pacific. I do not think it would be fair to say that any of the single nations out there have an effective conversation program. Maybe they do, but I am not aware of it.

I would not rule out the possibility of an organization in the South Pacific for the reasons that I raised earlier, the need for international management, the need for international cooperation and conservation through an organization in the South Pacific.

Senator INOUYE. The Governor stated that the resource in the North Pacific is being dangerously depleted. Is that your view also?

Mr. WOLFE. In the North Pacific Ocean?

Senator INOUYE. Yes.

Mr. WOLFE. Under—I believe the Governor was referring to the driftnet problem in the North Pacific. I agree unequivocally that now is a serious problem. I could not stress to you how strongly we feel, we, the State Department, about the practices of Japan, Korea and Taiwan with regard to driftnet fishing, illegal take of salmon, sea birds, marine mammals. A different problem in the South Pacific, as you are aware, is the driftnet fishery for albacore, and we have concern about that fishery also.

Senator INOUYE. I am glad to see we feel strongly about it, but, Mr. Ambassador, what have we done?

Mr. WOLFE. In the North Pacific?

Senator INOUYE. Yes.

Mr. WOLFE. We have negotiated with the government of Japan an agreement that under the Driftnet Monitoring and Control Act of 1987, in my opinion, a very strong enforcement agreement, enforcement on the high seas, an agreement that includes scientific monitoring with the Japanese on a cooperative basis. Two weeks ago we initialed with our Taiwanese counterparts an agreement to scientifically monitor and enforce on the high seas their squid driftnet fisheries, and so I am pleased to report to you, I believe we have made progress with those two countries in the North Pacific.

I am not pleased to report to you that we have little progress with Korea. Korea was certified along with Taiwan 2 or 3 weeks ago, and there is a very good possibility that Korea may face potential fishery trade sanctions as a result of their inability to work with us on the North Pacific driftnet problem. This is being reviewed within the various agencies in our government now.

Senator INOUYE. You suggested that the embargo should be discretionary and be used only when it is in the best interest of the United States. If that amendment were made, would you ever have an embargo?

Mr. WOLFE. That sounds like a question that Mr. Felando would want to ask me directly.

Senator INOUYE. I am very serious.

Mr. WOLFE. I know you are serious. I do not mean to be flippant with you. When—as long as I am in this job, and I do not know how long I will be in this job, but I have been here for 7 years, I have seen the need for an embargo on a number of occasions, and we have used the embargo.

And so I cannot speak for the future, but I can say that there certainly could be a very strong case made for embargoes in the future. Whether that is done or not, that is a different story.

There is also, in my opinion, a strong case to be made for making that provision discretionary, and let me give you one example that is a little closer to home to South Pacific. During the most sensitive part of our South Pacific tuna negotiations in 1985, we were involved in one of these major foreign policy problems with the Solomon Islands.

One of our boats was seized. We mandatorily put an embargo on that country. We found ourselves in a position where none of the other countries would continue the negotiations until we resolved the embargo issue. We resolved the embargo issue after great pain and great effort, but it would have been much easier had it been discretionary.

Could I make one point? You have made a very good point, Mr. Chairman, when you asked if the South Pacific Tuna Treaty could be used for management.

The South Pacific Tuna Treaty is, as you know, an access treaty at this point in time. We were interested and continue to be interested—the U.S.—in conservation. And I submit to the committee that the South Pacific treaty could be used as a vehicle, at least to begin some type of dialogue to get to the conservation issue, if the

Pacific island states had that type of interest. We would accommodate.

Senator INOUYE. What is the U.S. position with respect to the law of the sea, Article 64. That is the article that calls for coastal and fishing nations to cooperate directly or through international organizations in the management of highly migratory species such as tuna, swordfish, marlin and certain sharks. Do we accept this article and the annex listing all these species in their entirety?

Mr. WOLFE. I do not have that specific article with me, and I have not reviewed this particular provision in quite a while, but it is my understanding that there is ambiguity within the LOS articles dealing with tuna conservation and tuna management. It references at one point coastal state jurisdiction, but then it goes on to speak to international cooperation, in conservation and management. I believe this was part of the whole debate during the early days of the law of the sea because they were not able and I was not around at that time—to come to a fine-tuned definition as it were. So it is not as clear and as clean as some would like it to be other than—our interpretation is that it calls for international management, international cooperation.

Senator INOUYE. In your prepared statement you have indicated that coastal states with extended jurisdiction over tuna are less flexible when it comes to international management. Do you have an example of that?

Mr. WOLFE. I have an example, Mr. Chairman, that I probably should not raise during this hearing, but I would point out during past negotiations with the Government of Mexico and other Latin American governments, domestic positions here made it more difficult to achieve international management and conservation of tuna.

We have found that countries sometimes have their own national priorities and own national interest when it comes to management, as in the case of Mexico, and because of those priorities and the politics involved, if you will, it has made it very difficult to move in the cooperative conservation mode that we would all like to see. I do not think there is any question, and we would all agree that the conservation should be handled on the international basis.

Senator INOUYE. And you are suggesting that if we extended jurisdiction over tuna, we too would be less flexible?

Mr. WOLFE. Well, what I am suggesting to you, Mr. Chairman, is that if we extended jurisdiction over tuna, as has been proposed for a number of years, number one, it is not the right thing to do in my mind. I am not a scientist, but scientifically I think the tuna jurisdiction issue, the conservation issue, the management issue, and embargo issue all go hand in hand. It is very difficult to separate these different items. Without the tuna jurisdiction, we do not have the embargo. Without the embargo, we do not have the negotiating leverage that I mentioned to you earlier that I believe we had in the South Pacific, and I hope we will have in the eastern tropical Pacific.

That is not to say that there could not be a way for management, but I am just saying that it is very complicated and would be much more difficult.

Senator INOUYE. With all of the coastal states, with the exception of two, the United States being one of them, that have extended jurisdiction over tuna, how do we ever get international management if all of them are less flexible?

Mr. WOLFE. Three principal tuna fishing nations that have not extended jurisdiction out to 200 miles over tuna, the United States, Japan and Korea. There is, in my opinion, very good international management in the Atlantic through the organization that we are proposing to reauthorize today, the International Convention for the Conservation of Atlantic tuna. I think the bluefin stocks have been helped; 90 percent of the Japanese bluefin catch has been eleminated. And we seem to be doing very well in that international management regime.

I have unofficially suggested to you that that type of successful international operation could be applicable in other parts of the world.

Senator INOUYE. It does not work with Taiwan and Korea.

Mr. WOLFE. It could work with any country that had an interest. Taiwan and Korea are fishing in the South Pacific, i.e., purseining and long lining. If they were a party to any agreement, certainly a conservation and a management agreement, it could work.

Senator INOUYE. What is your position on the NOAA report that says that tuna should be included?

Mr. WOLFE. I am dumbfounded to hear that. There is a NOAA report that says tuna should be included within 200 miles?

Senator INOUYE. Yes.

Mr. WOLFE. I would defer to my colleague, but I would have to see that with my own eyes, Mr. Chairman.

Mr. BLONDIN. Thank you, Mr. Chairman.

My recollection is that that was simply in a recommendation phase.

Senator INOUYE. You mean your recommendations are not important to us?

Mr. BLONDIN. No, I would not say that. Rather, that this recommendation was part of an internal document and not approved by NOAA. I think that if we were to look at this, we would find that it was a recommendation internally with staff or I think it may have been an outside study with the councils at the time. This was back, if I recall, during the period that Dr. Calio was the Administrator of NOAA. We will provide for the record a little more detail on this, because my recollections are vague that far back. If there is something that has occurred more recently, I am not familiar with it.

[The following information was subsequently received for the record:]

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Washington, D.C. 20230
OFFICE OF THE ADMINISTRATOR

SEP 13 1989

Honorable Daniel K. Inouye
United States Senate
Washington, D.C. 20510

Dear Senator Inouye:

During the July 20, 1989, Senate hearing on tuna management, you referred to a recommendation to include tuna under the management authority of the Magnuson Fishery Conservation and Management Act (MFCMA). As I noted, this recommendation was part of a study prepared at the request of the former Administrator of the National Oceanic and Atmospheric Administration (NOAA), Anthony J. Calio. The study was the product of eleven individuals tasked to review the purposes of fishery management and to assess the system of management created by the MFCMA. The recommendation concerning management of highly migratory species was never endorsed by NOAA. NOAA Fisheries continues to manage tuna as dictated by U.S. law.

Sincerely,

Carmen J. Blondin
Deputy Assistant Secretary
for International Interests

NOAA FISHERY MANAGEMENT STUDY
EXECUTIVE SUMMARY

This Study was prepared at the request of Dr. Anthony J. Calio, the Administrator of the National Oceanic and Atmospheric Administration (NOAA). It is the product of 11 individuals knowledgeable and experienced in all aspects of fishery management, including environmental matters.

After identifying its tasks and basic convictions, the Study reviews the purposes of fishery management and assesses the system of management created by the Magnuson Fishery Conservation and Management Act (MFCMA or the Act). In spite of the accomplishments of the Act and because of the significant defects in the way the Act has operated, the Study finds that some major conceptual and operational changes are necessary.

The Study concludes that fishery management will be markedly improved by a clear separation between conservation and allocation decisions. It notes that the goal of conservation is to maintain resource productivity for future generations. Allocation relates to the needs and expectations of fishery users, and distributes the opportunity to participate in a fishery.

The Study also notes that the conservation decision, made in the form of an acceptable biological catch (ABC) determination, should be made before it is decided who the users will be. When the two processes are combined in one decision, the pressures are always to add more effort to serve the interests of more users.

The Study considers an array of institutional arrangements for conserving and allocating U.S. fishery resources ranging from a modification of the existing Council system to the use of entirely private, entirely Federal or entirely State systems. It endorses management by a partnership of State, Federal, Council and private entities.

Specifically, the Study recommends that NOAA set ABCs for regional fisheries at the national level, on the basis of the best scientific information currently available. NOAA would make full use of local and regional expertise and standard Federal rule making procedures in setting ABCs. Its final determination would become the ceiling up to which a Council could allocate in regional fisheries. Council allocations could not exceed an ABC, would be based on a redefined optimum yield, and would be the cornerstone of fishery management plans (FMPs). Council allocations in FMPs would be subject to a revised Secretarial review process.

Secretarial review would take into account only the data, views and comments which have been made a part of the official record and would be confined to the issue of consistency with the national standards and other applicable law. The Secretary's review of an FMP or amendment would have to be completed within 60 days of its official receipt by NOAA.

The Study also recommends replacing the process of gubernatorial nominations for Council membership with open nominations by any interested group or individual located within a Council's geographic area. A nine-member review board would have the authority and responsibility to consider all nominees and determine who is qualified. For each position to be filled, the review board would certify to the Secretary of Commerce the three best qualified nominees.

The Study recommends changes designed to improve interjurisdictional fishery management. These include recommendations that the Western Pacific and Caribbean Councils be eliminated and that non-tuna fisheries in those regions be managed by State, Commonwealth, and territorial governments. Further, the Federal Government should take immediate administrative action to clearly define relative Federal, State, Tribal, and local governmental authorities and responsibilities for management of interjurisdictional fisheries. Legislation is proposed to provide a basis for Federal support of research and data collection, and to establish Federal standards for coordinated management of interjurisdictional fisheries not subject to the Act.

Finally, the Study recommends that:

1. Government budgets give highest priority to the long-term, adequate funding of: research, catch and effort data collection, and enforcement.

2. Federal, State, Tribal, and university research capabilities and commitments to basic scientific studies be strengthened and focused on the long-term needs and problems of fishery management.

3. The MFCMA Section 103 exclusion for "highly migratory species" be repealed.

4. A fishing license and tonnage or other fees for all users (commercial, recreational and others) be established. The funds derived from fees would be used to improve fisheries throughout their range, including research, data collection, enforcement and habitat improvement.

5. Any impediments to limited entry in the Act be removed. Limited entry should be considered by the Councils as a management tool for both commercial and recreational fisheries, where necessary and useful.

6. Institutional barriers to full domestic utilization be eliminated. The Study defines full domestic utilization as the phasing out of foreign fishing and processing in the FCZ and the simultaneous development of the U.S. fishing industry capacity to catch, process and market FCZ resources. The Study emphasizes the U.S. primary processing industry in its analysis.

7. Councils receive and use expert advice on the enforcement of management measures they consider and that enforcement presence be improved based on a realistic accounting for cost. Further, the legal process for violations needs to be streamlined and use made of permit sanctions.

8. NOAA and the Councils develop and improve mechanisms to monitor activities that affect the habitat of fishery resources.

9. Other Government agencies cooperate with NOAA on the effects of their activities and policies on fishery management.

Certain legislative changes to enable these recommendations are included in the body of the Study and in the section on Legislative Proposals.

ACKNOWLEDGEMENT

This Study is the sole responsibility of the individual contributors. However, it would not have its present form, or be available at all in the time allowed, without a diligent staff. If the various parts speak with individual voices rather than as the work of a single author, this is due to staff's faithfulness to the contributors' words. Rough edges are a virtue when the subject matter covers such diverse interests and the purpose is to gain the most experienced and knowledgeable advice for restructuring public resource management.

For their long hours and undoubted frustrations, the contributors wish to thank Daphne White, Robin Tuttle, Ann Smith and Bruce Norman, the staff director. Special thanks are owed to Jan Charity who sacrificed several weekends to transfer our mutable prose to less mutable disks.

CONTRIBUTORS

The following individuals were asked by the NOAA Administrator to participate in this Study and submit this synthesis of their views:

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G. Highly Migratory Species

The U.S. policy on the management of highly migratory species -- as reflected in the management exclusion of the MFCMA -- has had unintended and severe resource management and political repercussions. Only Japan and the United States, for example, continue to maintain that highly migratory species cannot be managed within individual extended jurisdictions. Consistent with this position, the State Department has disapproved several versions of the Atlantic billfish FMP because those plans restricted the opportunity of the Japanese to catch tunas in the U.S. FCZ. The Study recommends that the MFCMA be amended to address these problems:

- All fishing activities within the FCZ should be subject to the jurisdiction of the Councils.

- Section 103 and elsewhere in the Act where "highly migratory species" are excluded from U.S. management controls should be repealed. Nothing in this recommendation implies that the U.S. should withdraw from international bodies such as the International Commission for the Conservation of Atlantic Tunas, or should reduce pressure for effective international arrangements for management of these fisheries.

- Federal agencies not directly concerned with fishery management should cooperate fully with Council actions when implementing their own regulations and agreements.

H. Fees and Licensing for Marine Fishing

As revenues collected from foreign fleets fishing in U.S. jurisdiction decline, other sources of financing or transferring of responsibility for fishery research and management must be developed. Costs of administering the Act and of fishery management programs in general should not be confined to the Federal Government alone. The Study feels that serious attention should be given to the setting of fees which provide for all classes of users to pay a reasonable part of the cost of management. These revenues should not be used to defray the general costs of government, but be shared fairly among the Federal Government and coastal State fishery management programs.

Further, licenses create a defined population from which to sample for research purposes and can assist routine data gathering. These benefits lower data collection costs. The Study recommends:

- A fishing license and tonnage or other fees for all users (commercial and recreational fishermen, and others) should be imposed, and funds derived from such fees used to improve the fisheries throughout their range, including research, data collection, enforcement, and habitat improvement. Section 304(d) of the Act should be amended to eliminate restrictions on the collection of fees.

- Factors such as the applicant's knowledge of pertinent harvesting rules and regulations, safety, seamanship, sanitation, environmental protection, and the proper care of fish to ensure high quality may be considered in issuing a license.

- A fishery-related permit or license should not be issued to anyone who has not submitted data about fishing activities as required by Federal law.

- Licenses should be issued by each coastal State to permit fishing in State and FCZ waters, with fees derived from sales of such licenses shared equitably with the Federal Government. If a coastal State fails to implement a licensing program within a reasonable period of time, the Secretary should draw up such a program to be used until the State is in compliance.

ADDENDUM
TO
THE NOAA FISHERY MANAGEMENT STUDY
SEPTEMBER 18, 1986

The contributors to the NOAA Fishery Management Study have considered public comments on the Study. The comments were constructive and helped the contributors refine their recommendations, most of which they affirm. Several points, however, need clarification. The hope is this addendum better conveys the Study's intentions.

Separating Conservation and Allocation

Commenters interpreted several terms or phrases in ways not intended by the Study. These terms or phrases were "at the national level," "scientifically," "ABC," "inviolable," "allocation," "conservation," and "management." Further, several technical issued were raised.

1) Reviewers picked up on the phrase "at the national level" in relation to the ultimate responsibility for determining ABC, but missed its context of "continued use of existing institutions" and making "full use of local and regional expertise." The Study's intent was to make NOAA ultimately responsible for the conservation determination. Beginning at the regional level, for species identified by the Council for management, NOAA would organize the best information currently available from NOAA's Fishery Centers, Councils, State agencies, users, universities, and any other individual or organization with relevant information. The resulting conservation determination (see "ABC" below) would be reviewed by the Secretary, published in the Federal Register, and used by the Councils as the basis for allocation and management decisions.

2) Reviewers reacted to "scientifically" as connoting a completeness and accuracy that may not be available. The intent was to rely on the best information currently available, irrespective of source. The Study underscores "currently available" and recognizes that information will sometimes be incomplete and have a wide margin of error. The scientific quality of information is not an argument for or against separating the process for determining conservation and allocation. Nor should the quality of information be used to delay decision making. With experience and continued effort to improve the data base, information will improve.

Highly Migratory Species

While representatives of the tuna industry expressed strong opposition to this recommendation, the majority of public comment endorsed the Study recommendation that highly migratory species be included in the Act. The Study therefore affirms its conviction that such action must be taken not only to aid in the management of tunas, but also to eliminate management conflicts with FMPs for other species such as billfish. Coupled with this recommendation is insistence that the United States continue to support international management of tunas to accomplish ocean-wide coordination among all concerned nations.

The U.S. continues to lose influence in the Pacific basin as a direct outgrowth of the existing policies on tunas. The Study insists that it is time for a change in that policy to more closely accommodate the attitudes and approaches of other nations.

Number of Councils

In view of the recommendation on highly migratory species, the Study recedes from its recommendation to terminate the Western Pacific and Caribbean Councils. The Study is concerned with assuring continued effective management of all fisheries in the island areas under U.S. jurisdiction. The Study's change in position was influenced by persuasive public comment that:

-termination of Council management could produce an immediate operational vacuum in fishery management in the island areas;

-harvest of many species occurs at significant levels in the FCZ, and strong Federal-State coordination is therefore needed for effective fishery management;

-equitable treatment of island people demands their continued participation in shared management within the Council system, and termination of such participation would certainly generate negative perceptions of U.S. fairness.

Senator INOUYE. What do you think of that internal recommendation?

Mr. WOLFE. What do I think? I do not agree with it at all. I would vehemently oppose it.

Senator INOUYE. So you do not agree with your former Administrator?

Mr. BLONDIN. Well, I did not answer that. That was Ambassador Wolfe.

Mr. WOLFE. I do not agree with him.

Mr. BLONDIN. But I would have to say that whatever I may feel personally is not the issue; it is, rather, the organization. And we, as a basic principle, feel that the only way to effectively manage these highly migratory species is to do it throughout the range.

Now, we have had success in the Atlantic, as Ambassador Wolfe has said. We have had some success as well with IATTC during the period when there was cooperation between all of the governments. If there is a question of can we deal with this in a mixed manner, certainly that is how we are dealing with billfish at this point and swordfish. It is much more complicated and not as easy. And I

think that is the reason for the view of NOAA that it is better to manage with one organization throughout the range.

Senator INOUYE. Does the Commerce Department have any view on the reauthorization of the Central, Western, and South Pacific Fisheries Development Act?

Mr. BLONDIN. Mr. Chairman, I did not come here with a prepared statement today for your committee. We were not asked to prepare such a statement. I did, this morning before the House subcommittee, give a prepared statement, and I would be very happy to make that available to you. We did address some of these issues.

Senator INOUYE. I would appreciate that for our files very much, sir.

Mr. Ambassador, Mr. Blondin, I thank you very much.

Mr. WOLFE. Thank you, Mr. Chairman.

Senator INOUYE. And now we will have our first panel consisting of Dr. Richard Shomura, the chief researcher with the Hawaiian Institute of Geophysics, School of Ocean and Earth Sciences and Technology at the University of Hawaii; Dr. James Joseph, Director of the Inter-American Tropical Tuna Commission; and Mr. William Paty, chairman of the Western Pacific Fishery Management Council.

Gentlemen, I thank you for your participation in this afternoon's hearing. I realize the long distances all of you have traveled to be with us, and I am most grateful for that.

May I call upon Dr. Shomura first?

STATEMENT OF RICHARD SHOMURA, RESEARCHER, HAWAII INSTITUTE OF GEOPHYSICS, SCHOOL OF OCEAN AND EARTH SCIENCES AND TECHNOLOGY, UNIVERSITY OF HAWAII

Mr. SHOMURA. Thank you, Mr. Chairman, for the opportunity to appear before you. I would first like to make a correction. Unfortunately, I do not have a Ph.D. degree, so we can dispense with that.

Senator INOUYE. Well, we can give you one right now.

Mr. SHOMURA. I am Richard Shomura from Hawaii, and am presently affiliated with the University of Hawaii. I retired from Federal civil service in September 1988 after serving 38 years with the National Marine Fisheries Service and its predecessor, the Bureau of Commercial Fisheries.

Thirty-five years of my career were spent as a biologist and fishery administrator in Hawaii, where our research focused, at least in the earlier years of my career.

My testimony this afternoon represents my personal views and are not those of the University of Hawaii or the federal agencies with which I was a affiliated with during my career with the U.S. Government.

I do not believe the available biological evidence is sufficiently adequate to justify special treatment of tunas in the Magnuson Fishery Conservation and Management Act. I believe it is appropriate at this time to amend that act and correct this shortcoming by including tunas into the act.

Arguments of inclusion of tunas in the Act have been discussed in a number of official hearings and written in various outlets. It

may be appropriate at this time for me to briefly review some of the major points.

The act excludes migratory species from fishery management authority and defines highly migratory species as species of tuna which, in the course of their life cycle, spawn and migrate over great distances of the ocean. The United States, as indicated earlier, took the position that rational management of such species was impossible and took the position that only international management could safeguard the biological status of these species.

Although knowledge of the life history of some tuna species is limited, there is general acceptance that among the tunas there are some species that move trans-oceanwide, and by most definitions, would be classified as highly migratory.

The list would include the northern bluefin tuna, the southern bluefin tuna, which is shown in the figure there. As you will note, the southern bluefin tuna extends its movement from Australia to as far west as the Atlantic Ocean.

And the albacore tuna.

The next slide will show the albacore movement in the Pacific and the Atlantic. Based on tagging evidence, there is no question that the albacore moves trans-oceanwide, at least in the north Pacific.

The available evidence, however, suggests that the two most important commercial tuna species, the yellowfin tuna and skipjack tuna, are less than transocean migrants. The yellowfin and skipjack catch make up about 70 percent of the world tuna catch.

Chart C shows the movements of the skijack based on the South Pacific Commission's tagging experiments. While some of the skipjack individuals move extensively, they are not considered as transocean migrants.

It is interesting and important to note that in a study of the data presented here, the South Pacific Commission's biologists indicated that one should not be mesmerized by these long-term movements of individual skipjack tuna; the SPC scientists noted that these movements should be treated as exceptions, rather than the rule.

The basis for this is that the dynamics of the skipjack tuna resource in the South Pacific islands were such that an island state with an exclusive economic zone of more than one million square kilometers could have a skipjack fishery which would encounter almost no interaction with the skipjack fisheries of neighboring nations.

What this in essence means, if it is correct, is that, under certain circumstances, a single nation may be capable of managing a tuna resource within its 200-mile zone.

This same report also noted that the conditions may also apply to the yellowfin tuna in the region.

Although tens of thousands of yellowfin have been tagged and released in the Pacific and Atlantic Oceans, the majority of the recoveries have been made less than 300 miles from the tagging site.

The next slide shows you some of the results of the tagging of yellowfin tuna.

Several other smaller tunas, including the kawakawa, appear to be localized populations. These are true tunas. There is no evidence available that the kawakawa, which occurs in the Hawaiian Is-

lands, that this species extends its distribution beyond a limited several hundred miles from land. The evidence is based on catch statistics as well as identification of tuna larvae caught in these waters.

The exclusion of tunas from the Act on the basis of highly migratory definition is inconsistent with the facts known for other pelagic species. Mr. Chairman, I believe you drew attention to this inconsistency during your opening statement.

The list of other pelagic species noted for extensive movements includes black marlin, blue marlin, white marlin, and striped marlin. A black marlin tagged off Mexico was recovered 1½ years later off New Zealand, a distance of 5,700 miles. This feat was all the more remarkable in that this individual traversed from the northern hemisphere into the southern hemisphere.

Thus, while tunas are excluded from the act, the bill fishes and other possible long-distance migrant species are included under management jurisdiction dictated by the Act. I believe a basic point to be made here is that whether a species undergoes transocean movement should not be germane to the issue of management within the exclusive economic zone. A 200-mile zone, after all, is not based on ecological considerations, wherein the distribution of species is dictated by environmental considerations.

Management of a resource should be based on whether the resource exists solely within the EEZ or is outside of it part of the time. If the resource confines itself completely within the 200-mile zone, then a coastal state is in a position to apply all of its management options solely. If not, there definitely is a need to engage other nations in the management strategy.

The point to be made here is that having domestic management regulations should not be mutually exclusive from having international agreements.

As an example, Australia and New Zealand both claim jurisdiction over tunas within their 200-mile zone. Yet, over the past several years, Australia, New Zealand and Japan have held formal meetings of scientists and administrators in an effort to put together a management strategy for the southern bluefin tuna. The most recent decision was to drastically cut each nation's fishing effort and southern bluefin tuna catch from within and outside of the 200 mile EEZ of Australia and New Zealand.

Our knowledge of the time and space distribution of most tuna resources is still inadequate for full international management purposes. We still do not know the dimensions of tuna as a management unit.

As an example, Mr. Chairman, to identify a problem of your home State, we presently do not know whether the yellowfin that occurs within Hawaiian waters moves as far southward as is migrant to the Line Islands, which is about 800 or 900 miles south of the Hawaiian archipelago, or westward to the Marshall Islands.

Ignoring the problem will neither provide the advice nor encourage international management. I urge that this problem of stock structure be addressed by the United States. This information is certainly of prime importance to the United States and other fishing nations.

By excluding tuna from the act, we have directed scientific resources away from this very important species group. By including tuna in the act, I believe we can promote better use of tunas within the EEZ of the United States, increase our basic knowledge of its biology, and develop a stronger basis for international cooperation and management.

Thank you, Mr. Chairman.

[The statement follows:]

STATEMENT OF RICHARD S. SHOMURA, RESEARCHER, HAWAII INSTITUTE OF GEOPHYSICS, SCHOOL OF OCEAN AND EARTH SCIENCE AND TECHNOLOGY, UNIVERSITY OF HAWAII

One of the most contentious issues of the Magnuson Fishery Conservation and Management Act (PL 94-265; henceforth referred to in this report as the "Act") is the exclusion of tuna from management consideration by the U.S. The basis for exclusion is that tunas are "highly migratory" and that there is a tacit belief that highly migratory resources can only be managed effectively by international arrangements.

The U.S. is the only country that has held steadfast to the "open access" policy toward tuna fishing. Japan, one of the major tuna fishing nations in the world, also holds the "highly migratory" viewpoint; however, Japan's willingness to enter into arrangements with coastal nations which claim jurisdiction over tunas occurring within their exclusive economic zones (EEZ), suggests a de facto recognition by Japan of coastal states' jurisdictional claim over tunas. Japan also manages its domestic waters tuna fisheries. Further, the U.S. itself has also recently engaged in a formal access arrangement with South Pacific nations (FFA 1989).

Since passage of the Act in 1976, opinions have been expressed as to the validity of excluding tunas from the Act. The problems have centered around the definition of "highly migratory", the inconsistent application of the criteria to the other species, and the view that management of tunas can only be carried out under broad international arrangements.

The present report discusses briefly the biology of tunas and other pelagic species as they relate to the issue of "highly migratory" and comments on the tunas management issues.

BIOLOGY OF TUNA RESOURCES

Many descriptive and analytical accounts of tuna fisheries and tuna resources exist in the available literature today. For purposes of this report, it should suffice to note that one of the basic problems in developing rational managment plans for tunas is the lack of stock structure information (Argue et al. 1986). While some advances have been made in recent years, the uncertainty of the time and space dimensions of a tuna "management" unit is the same today as has been for several decades. Methods utilized to address this problem include tag and recovery of individual fish, analysis of morphometric and meristic data, genetic techniques, an indirectly by the analysis of catch and effort statistics (Argue, et al. 1986). While each method has undergone periods of "favor" by tuna scientists, the tag and recovery method has provided much of our basic understanding of the stock structure of tunas. To date more than 600,000 tuna have been tagged world-wide (Hunter et al. 1986); nearly 400,000 tags have been applied to skipjack and yellowfin.

Technically, there are 13 species included in the group considered to be tuna in the sense of the Act (LMR 1979). Figure 1 shows the phylogenetic relationship of the tuna group with closely related species. A review of the fisheries and biological data (Rosa 1963, NMFS and FSFRL 1980) provides evidence that the tuna species encompass a wide range in distribution, abundance and habitat. On the basis of the available evidence, one study (LMR 1979) suggests that all of the tuna species should be classified as "highly migratory". While tag and recovery data give strong support to a "highly migratory" classification for tuna species, there appears to be sufficient evidence that many other tuna species are less than "highly migratory".

If "highly migratory" refers to tuna species that have demonstrated trans-ocean movement, the category would include bluefin tuna (*Thunnus thynnus*), southern bluefin tuna (*T. maccoyii,*), and albacore (*T. alalunga*). The bluefin tuna in the Atlantic and Pacific Oceans have demonstrated trans-ocean movements on more than one occasion (Joseph et al. 1980). The evidence of trans-ocean movement of albacore tuna in the North Pacific is considerable (Clemens 1961, Otsu and Uchida 1959).

Southern bluefin tuna tagged off Australia have been recovered as far west as off South Africa in the Atlantic Ocean (Hunter et al. 1986).

Tagging studies of yellowfin tuna (*T. albacares*) and skipjack tuna (*Katsuwonus pelamis*) have not demonstrated trans-ocean movements (Fig. 2 and 3).[1] Tens of thousands of yellowfin have been tagged in the Pacific and Atlantic; the recovery data suggests less than trans-ocean movement. Yellowfin tuna appear to range in geographical limits of hundreds of miles rather than thousands of miles (Fink and Bayliff 1970, Hilborn and Sibert 1988). Skipjack tuna show more extensive movements than yellowfin; however, a recent analysis of tagging data (Hilborn and Sibert 1988) showed that the extreme movement of some individual skipjack tuna should be considered as the "exception rather than the rule". About 85% of the skipjack tagged during the South Pacific Commission tagging experiment were recovered within the EEZ of the country of release; generally, recoveries were within 300 miles of the original tagging sites (Hilborn and Sibert 1988).

Although there have been claims that all of the tuna species can be classified as "highly migratory" (LMR 1979), it would be difficult to label little tuna (*Euthynnus spp.*) and frigate mackerel (*Auxis spp.*) as "highly migratory". Both genera appear to have species that have restricted ranges; e.g., kawakawa is pretty much confined to waters of the Hawaiian archipelago.

The Act refers to extensive spawning of tunas as evidence of the "highly migratory" nature of tunas. While some tuna species are known to spawn over a wide geographical range, others have limited spawning sites. Yellowfin and skipjack tuna spawn throughout most of the equatorial zone; however, their movement based on tag-and-recovery data suggests a less than trans-ocean movement. Larval abundances suggest that yellowfin spawn near islands; whether this indicates the presence of local stocks is unclear. Upwards of 100-old increased abundance of yellowfin larvae have been noted from waters within one mile of shore (Boehlert and Munday 1989). On the other hand, the highly migratory southern bluefin tuna has a restricted spawning area; the only area known to date occurs off the waters northwest of Australia. Finally, the larvae of kawakawa have not been reported from waters distant from land.

OTHER PELAGIC SPECIES

Although tunas have been excluded from the Act on the basis of being "highly migratory", there are several other pelagic species which have demonstrated substantial geograpic movements but are included in the Act. A black marlin (*M. indica*) tagged off Mexico was recovered 613 days later off New Zealand; the movement represented a straight line distance of more than 5,700 nautical miles (Squire, per. comm.). Further, this fish crossed from the northern hemisphere into the southern hemisphere, a feat no commonly undertaken by marine organisms. Several other black marlin tagged off Australia have been reported to move northward over several thousand miles (Joseph et al. 1988).

Other billfishes including the Pacific blue marlin (*M. mazara*), striped marlin (*Tetrapturus audax*), and white marlin (*T. albidus*) have demonstrated movements as extensive as those of yellowfin and skipjack tuna (information in Joseph et al. 1988).

There undoubtedly are other pelagic species included in the Act which occur within the EEZ of the U.S. and which undergo extensive movements relative to the 200 miles boundary, e.g. mahmahi, wahoo and certain species of sharks. Casey (1985) reported the transatlantic migration of the blue shark (*Prionace glauca*). Firm evidence of movements of many of these species; however, are presently lacking.

TUNA MANAGEMENT ISSUES

Since the 200 mile outward boundary of the EEZ of the U.S. and other coastal states is not based on ecological considerations, the use of "highly migratory" as a criteria for management seems moot. A coastal state has at its disposal the full range of domestic management options if the resource falls completely within its EEZ. Even for tunas, Hilborn (as reported in Hilborn and Sibert 1988) concluded that countries with more than 1,000,000 square kilometers of EEZ would not have to worry about interaction with other nations fishing for skipjack in the region. Hilborn further suggests that this may also be true for yellowfin tuna. If a resource management unit extends beyond the 200 miles zone and the management unit is harvested by other fishing nations, the need for international agreement becomes apparent. The involvement of other nations is dependent upon the number of na-

[1] These figures were not reproducible.

tions fishing the management unit outside of the coastal states, 200 mile EEZ, and not whether the resource is "highly migratory".

Inclusion of tunas within the management purview of a coastal state has not deterred some nations from entering into international agreements to jointly "manage" a tuna resouce. Presently, there is a general agreement among tuna scientists that the southern bluefin tuna is heavily overfished (Anon 1988) and the resource is faced with some severe recruitment overfishing problems; the spawning biomass is considered to be well below the levels which will provide for the maximum sustainable yield. For the past several years, Australia, New Zealand and Japan have held formal tri-lateral meetings of scientists and government officials to evaluate the status of the resource and to promulgate management measures. Recently, the three nations agreed to impose severe restrictions on their fisheries within and outside of the EEZ of Australia and New Zealand (K-M 1989).

RESEARCH NEEDS

The enactment of EEZs by coastal states have highlighted the lack of resource information for many important commercial species. While more needs to be known about the ocean and its inhabitants in general, a resolution of the tuna management issues faced by the U.S. and other nations require that greater attention be directed to (1) characteristics of "management" unit, (2) time and space distribution of the tuna management units, especially those of yellowfin and skipjack through the use of recent advances in satellite oceanography, oceanographic numerical models and remote sensing, (3) better assessments of the tuna resources, (4) better understanding of the interrelationship of tunas and their environment, and (5) developing a formal structure for scientists to have access to commercial and recreational tuna data for purposes of assessment analyses. As other nations increased their research activities on tunas, the U.S. has nearly ceased tuna research since passage of the Act.

FISHERMEN'S PROTECTIVE ACT

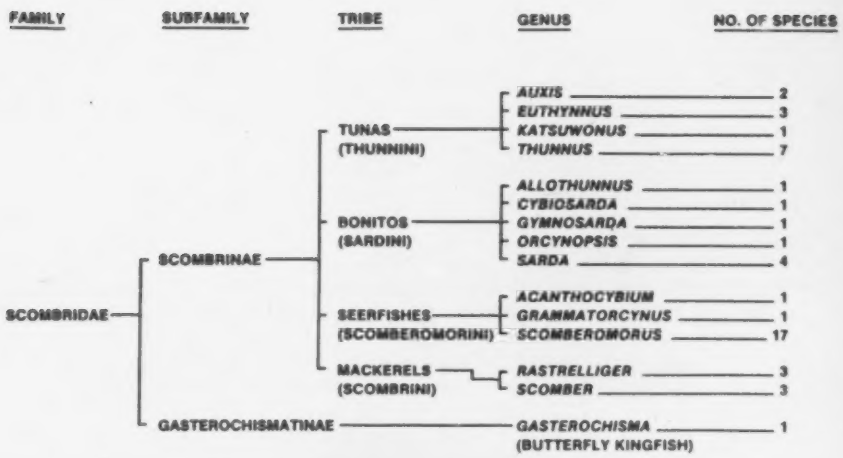
There is a need for the U.S. government to protect its domestic fishing industry from illegal actions taken by foreign nations when U.S. vessels operate in distant waters. The Fishermen's Protective Act provides this protection. Within my understanding of the Act, I would urge support for its continuation. However, exclusion of tuna has not helped the status of U.S. fishermen in foreign waters; it has only led to the need for bilateral and multi-lateral agreements.

CENTRAL, WESTERN, AND SOUTH PACIFIC FISHERIES DEVELOPMENT ACT

The U.S. tuna fisheries agreement with the South Pacific island nations has ameliorated some of the ill feelings engendered by the exclusion of tunas from the Act. Until a resolution can be achieved with regard to the tuna exclusion problem, it would be prudent for the U.S. government to continue its role in the tuna issue. It should be noted, however, that a reauthorization of the South Pacific Fisheries Development Act should provide for access to tuna catch and effort data of the U.S. tuna fleet operating in the South Pacific to tuna scientists. Presently, these statistics are not made available to all researchers due to the confidential nature of the data. Mechanisms are readily available to address the confidentiality problem.

FIGURE 1

THE SUBFAMILIES, TRIBES, GENERA, AND NUMBER OF SPECIES OF THE FAMILY SCOMBRIDAE (BASED ON COLLETTE AND CHAO, 1975, from Klawe, 1977) 1/



1/ Reproduced from Fig. 1 of LMR (1987)

Senator INOUYE. I thank you very much.

I believe there is a vote pending at the present time, so may I call a short recess.

[Recess.]

Senator INOUYE. Once again, I thank you very much, Mr. Shomura.

According to the prepared statement submitted by Ambassador Wolfe, the witness who just appeared before us, the suggestion you are making that tuna is a more coastal-oriented species has, and I quote, "no basis in fact and flies in the face of the documented scientific evidence produced by all of the international tuna organizations and supported by the world's leading tuna scientists.'

Mr. SHOMURA. Thank you, Mr. Chairman.

I would respond to that by noting that the South Pacific Commission's paper, which I referred to, was just published last year, I believe. It may be that Ambassador Wolfe is not aware of that particular publication.

I think there is general agreement among tuna scientists that the family which the tunas belong in does contain species that do not move extensively. In my presentation, I was looking at the spectrum of movement, comparing the transocean movement on the one extreme, and tunas that are more coastal, such as the kawakawa at the other extreme. There are several other species that fall in the same realm as the kawakawa that are very coastal and associated with narrow, island-type boundaries.

Even with the yellowfin, I do not believe this species can be considered to move extensively.

Senator INOUYE. So, as far as the findings of your fellow scientists, not all tuna are highly migratory?

Mr. SHOMURA. I think it is a matter of the definition of highly migratory. I think the unfortunate thing is the act does not define highly migratory more specifically. I was using my definition of highly migratory as meaning transocean movement.

Senator INOUYE. As several witnesses have and will be suggesting, that the use of these high seas drift nets by the Japanese, Taiwanese, and Korean fleets have become a matter of growing concern. What is the potential impact of these drift net fisheries on tuna resources in the Pacific?

Mr. SHOMURA. Mr. Chairman, if I may comment on it, I think the potential impact is tremendous. It is not that the amount of gill nets is a very small amount; it does represent a tremendous amount of fishing effort, both in the north Pacific, and more recently, in the south Pacific.

If my understanding is correct, the scientists from Japan and the United States have been looking very carefully at the north Pacific albacore for probably the past 10 to 12 years. And recent findings are that the younger ages of albacore in the north Pacific, are missing from the traditional fisheries. There is speculation it may be the result of the extensive gill net fishing that has been going on for the past 10 years.

There is no question that the gill nets catch small albacore. Also, there is no question that these catches amount to a tremendous tonnage and that there may be a problem of impact on the albacore resource by gill nets.

Senator INOUYE. Have these nets had any impact on other species?

Mr. SHOMURA. One of the problems is that we do not have complete data of what the catch of these gill nets constitute. While the gill nets are directed towards squid, it is recognized that they catch salmon, albacore and skipjack tuna. There have also been reports of gill nets catching seabirds and turtles and dolphins.

Senator INOUYE. Thank you very much, sir. Dr. Joseph.

STATEMENT OF DR. JAMES JOSEPH, DIRECTOR, INTER-AMERICAN TROPICAL TUNA COMMISSION, SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CA

Dr. JOSEPH. Thank you, Mr. Chairman. I have some prepared testimony that I assume will be entered into the record. And I would just like to say a little bit about tunas and world fisheries for tunas, which you asked me to comment on. Unfortunately, there is not much time, so I cannot give a lot of testimony with regards to that.

I would like to say, just by way of introduction, that I have been involved in tuna research and management for 30-some years and have published more than 100 articles and books on the subject. And I am here not to represent any particular interest group that we are familiar with—recreational fishermen, commercial fishermen, or political interest groups.

What I am here to represent are tunas. That is what I feel I am responsible for, to ensure that tunas are maintained at levels that current generations can enjoy and that are around for future generations to enjoy. I see that as our responsibility with regards to the conservation ethic.

As you can see today, we have heard all kinds of statements with respect to tunas, whether they are migratory or not or whether there has to be international management or not. And my position, unequivocally, is that tunas are migratory and need international management.

My colleague, Richard Shomura, with whom I have worked for most of those 30 years, has talked about several species, showed you migrations of bluefin and albacore, and commented that, perhaps, some of the species are not as migratory—and indeed they are not. They do not make the mass trans-oceanic migrations that bluefin and albacore like those species do. The bluefin may cross the Pacific two or three times in its life.

In the southern hemisphere, the bluefin there is distributed circumpolarly, and, in fact, that particular species is in dire condition as evidenced by scientific information that, indeed, there is some danger of recruitment failure. Efforts in that region, particularly by Australia, have been ineffective in protecting the species. Unilateral coastal state management, in that instance, did not work.

With reference, Mr. Chairman, to the graphs that Richard has showed you, for example, he commented skipjack tuna are not highly migratory, and he also mentioned a paper or that subject based on data collected by the South Pacific Commission. That paper has disputed the highly migratory claims for shipjack and yellowfin. And, really, the intent of that paper, published in a policy journal, was to attack the U.S. position on tunas. It was really not a scientific paper.

If one takes the same data that they presented and looks at the dispersal rate of the tunas, as evidenced by taggings data that were used in that paper, one can see that more than 50 percent of the animals that are recruited in a coastal zone end up outside the economic zone of that particular country. That is clear evidence, in my opinion, that there has to be international management of tunas.

That is also true with regards to skipjack in the eastern Pacific. One of the largest fisheries in the world is in the eastern Pacific, and skipjack tuna, one of the major species taken by that fishery, do not even spawn in that region. Many of them end up, Mr. Chairman, in your Hawaiian waters.

We have tagged thousands of shipjack in the eastern Pacific, and almost all of the recoveries of fish out over a year are recovered in Hawaiian waters or to the west as far as the Caroline islands. And so unilateral management by a coastal state unilateral management would not work for that species.

Yellowfin tuna, likewise, are not as migratory as bluefin and albacore, as you have seen from the charts, but they, nevertheless, are migratory. In the eastern Pacific, they transit juridical zones just as easily as you and I walk across the street. They do not pay attention to manmade boundaries. In the Atlantic Ocean, there

have been a number of tag returns from fish tagged off the United States and recovered off of West Africa.

So there is, indeed, ample evidence to indicate that tuna have to be managed internationally. And my reason for being here is to provide testimony to you, the policymakers, so that you can make enlightened decisions. You need to know something about the animals and their behavior—what they do, how fast they grow, and how fast they move, if you are to make enlightened conservation and management decisions.

And, indeed, the community of nations, Mr. Chairman, in article 64 that you referred to earlier, called on all coastal states and distant-water fishing states alike whose nationals are involved in the fishery to cooperate through international organizations for the effective conservation and management of tuna. And in your comments and Ambassador Wolfe's comments earlier on, that statement is in article 64, paragraph 1. Nobody contests that. It is article 2 that Ambassador Wolfe was really referring to, and he will correct me if I am wrong.

So there has to be international management. There has been some successful international management of fisheries and some not so successful. There are two organizations in the world that deal exclusively with tunas. In the eastern Pacific, there is the Inter-American Tropical Tuna Commission, the organization that I am responsible to. In the Atlantic, there is the International Commission for the Conservation of Atlantic Tunas which has studied all the species of tunas and bill fishers and has managed bluefin and yellowfin. Bluefin was a heavily overfished species; it is still overfished. It is currently under management, and it needs continued management.

In the eastern Pacific, for 15 years, we had a conservation program on yellowfin tuna. In the Indian Ocean an area of rapidly expanding production, the nations of the region have determined that there is a need for international cooperation and, indeed, have initiated measures to establish an international article 64-type body.

In the western Pacific, there is no body that is responsible for both the science and the management of tunas. An area of tremendous expansion, much of the United States fleet has transferred to that area to operate. Korean, Japanese, and Taiwanese vessels fish there. The catch is large and is increasing. There will soon be a need for management, and in my opinion, for an article 64-type body could accomplish this.

There is no doubt in my mind, Mr. Chairman, that international management is a requirement but not only because of the tunas. If, indeed, the tunas did not migrate at all, the fleets that fish tunas are as migratory, or more migratory, than tunas. A single boat fishes on the one side of the Pacific, and then on the other side of the Pacific. Indeed, many boats fish in two oceans in a single year, so that has to be taken into account.

There is a need for international management, but whatever international organizations are established, they have to be cognizant of several principles. Number one, they have to recognize that tunas are migratory, and, really, no nation, with respect to the principal market species of tuna, can unilaterally manage the

tunas to ensure that we are going to have adequate stocks of tunas for the future generations.

Secondly any management decisions that we make must be based, Mr. Chairman, on scientific facts. And these facts have to be established by scientific studies made through international cooperation of nations.

Thirdly, Mr. Chairman, we have to be aware of the realities of current law of the sea, principles that are recognized by most nations of the world. We have to be aware of coastal states' rights, because the tunas spend some of their time in the coastal waters, but we also have to be aware of historic involvement in the fishery, and that must be recognized in any effective management regime.

Fourth, we have to deal with the problem of access, because both the tunas and the boats move around, and there have to be arrangements for access. Fifth, we have to look at the economic problems, too, and we have to ensure that there is some balance between the capacity of fleets to harvest tunas and the capacity of the animals themselves to sustain those harvests.

So, concluding, Mr. Chairman, I would only say that international management is a necessity. If we are going to have effective international management, nations have to compromise with respect to principles of law of the sea. They have to be aware not only of man's laws, but they have to be aware of nature's laws, too. Thank you, and I am sorry for the overtime.

[The statement follows:]

STATEMENT OF JAMES JOSEPH, DIRECTOR, INTER-AMERICAN TROPICAL TUNA COMMISSION

I am James Joseph, Director of the Inter-American Tropical Tuna Commission. I am a scientist by training and profession, and have worked in the field of tuna research and management since 1958. I have advised numerous governments on matters related to tuna fisheries, and the management and conservation of these species; I have lectured on these subjects all over the world, published more than 100 books and articles on tuna-related subjects, and have participated in or chaired most major international conferences on tunas held in the last 25 years.

I have been asked to give an overview of world fisheries for tunas, describe and evaluate international agreements for tuna management, and recommend measures for improving management. However, before discussing these three points, I would like to present a little background information on the fish and the fleets that harvest them, since effective management provisions must be based on an understanding of both the animals and the fishery.

Tunas are found in all the major oceans and seas of the world. They are to the sea as the Bedouin are to the desert, wandering continuously in search of sustenance, recognizing only the environmental limits set by nature and oblivious to boundaries established by man. They are highly specialized creatures, and are precisely attuned to their nomadic lifestyle. They are prodigious consumers of food and oxygen, and to derive enough of the latter from the water to keep themselves alive they must swim continuously, mouth agape, forcing water over their gills like a jet forcing air through its engine. If they stop swimming they suffocate and sink, since they are heavier than the water in which they live. In this way they can and do cover great distances: swimming at the slowest speed necessary for survival, a 30-inch tuna can cross the Pacific Ocean in three months.

Some species of tunas migrate regularly across oceans several times during their lives. In the Pacific Ocean, for example, northern bluefin tuna spawn northeast of Taiwan. The young drift north in the Kuroshio current, and are fished off Japan; they then cross to the eastern Pacific, where they are taken by fishermen from the United States and Mexico. Studies show that some of them travel back to the western Pacific, and may undertake the round trip two or three times. The bluefin tuna of the southern hemisphere are even more migratory: their travels take them from their spawning grounds in the eastern Indian Ocean to throughout the Pacific and Atlantic. Albacore also migrate regularly across both the Pacific and Atlantic Oceans.

Other species of tunas, although not as as migratory as bluefin and albacore, still travel extensively. For example, skipjack tuna caught in the eastern Pacific, one of the most important tuna fisheries in the world, are not permanent residents of the region, but migrate there from areas to the west, where they return to spawn after spending only a few months of their lives feeding in the eastern Pacific. Many, if not all, of the fish leaving the eastern Pacific pass through the skipjack fishery of the Hawaiian Island chain. Skipjack in the equatorial western Pacific, which support the world's largest skipjack fishery, migrate poleward to off Japan in the north and off New Zealand and Australia in the south, where they also support major fisheries. Yellowfin tuna, apparently the least mobile of the species, still undertake extensive migrations: tagging studies show that they travel up to 3,800 miles in the Pacific, and that they cross the Atlantic. However, the extensive tagging data indicate that most tagged yellowfin are recaptured within 1,000 miles of their point of release.

During their migrations, all species of tunas traverse the jurisdictional zones of many nations, as well as waters outside the control of any nation. What happens to them on the high seas or in any nation's waters affects their abundance in other areas. This sets the tunas apart from other less nomadic fish, and requires that they be accorded special treatment to ensure their proper management. Conservation measures must apply to tuna stocks wherever they occur, in national and international waters alike, and this means that international cooperation is essential for the proper conservation and management of all tuna species.

Many different types of fishing gear are used to catch tunas, including nets, harpoons, traps, hooks and lines, spears, and snares. However, over 95 percent of all tuna landed are taken by purse-seine nets, poles and lines, and longlines. The fishery concentrates on the principal market species, a category that includes six species of "true" tunas: skipjack, yellowfin, bigeye, albacore, northern bluefin, and southern bluefin.

Purse seining is a surface fishery that depends on the tendency of tunas to form schools. The vessel encircles a school of tunas with a net that may be more than half a mile long and six hundred feet deep; the bottom of the net is the closed, or "pursed", by pulling a cable which runs through rings attached to the bottom edge of the net, thus trapping the fish. This form of fishing accounts for about 50 percent of the world tuna catch.

Pole-and-line fishing is responsible for about 30 percent of the world catch. This method uses live fish as bait; these are kept alive aboard the boat in tanks of circulating sea water. When a school of tuna is sighted, the fishermen throw the bait overboard to attract the tunas, a process called "chumming". When the tunas approach the boat, they are caught with poles and lines, using lures with barbless hooks. This method is used throughout the tropical and temperate oceans of the world.

Longline vessels, which take about 20 percent of the world catch, set out lines that may extend for up to 80 miles, supported by floats; dangling on branch lines from this main line are some 2,000 baited hooks. A single longline set can catch many different species of tunas, billfish, and other related species, as well as sharks and other fish.

These commercial vessels form only one part of the fisheries for tunas and billfish. These fish also support important recreational fisheries around the world, although the exact amounts caught by sportsfishermen are not well documented on a world-wide scale. Major big-game fisheries are based in a number of ports around the world, and employ tens of thousands of boats.

In 1987 the world catch of the principal market species of tunas amounted to about 2.4 million tons, some 2.6 percent of the 92 million tons of all species of fish taken during that year. Although tunas represent only a small part of the total world catch of all fish by volume, their value, and hence economic importance, is much greater. In the same year, the total catch of billfish (swordfish, sailfish, marlin, and spearfish) was about 115 thousand tons.

The six principal market species account for most of the canned or frozen tuna sold (Figure 1). Skipjack tuna, the smallest of the six, accounts for the largest catch (987 thousand tons), followed by yellowfin (823 thousand tons); these two species together make up 76% of the total tuna catch. Next come bigeye and albacore (238 and 171 thousand tons, respectively), and lastly the

two species of bluefin tuna, which grow to the largest size but represent only a small portion (55 thousand tons) of the total catch.

These 2.4 million tons of tunas are taken by the fleets of more than 100 countries, but ten nations account for nearly 85 percent of this total (Figure 2). The top producer in terms of total tonnage is Japan, with nearly 30 percent, followed by the United States with about 12 percent. However, just a few years ago Japan took nearly 40 percent of the catch, and the United States some 20 percent; if this trend continues, the U.S. will soon fall from second to third or fourth place. While the U.S. share of production is declining, it is still the largest consumer of canned tuna in the world, and currently accounts for about 25 percent of the global catch. Over half of this amount is imported, and it seems likely that this proportion will increase in the future, since the U.S. tuna fleet continues to shrink.

The world trend in total tuna production has shown a steady increase of over 6 percent per year over the last 25 years (Figure 3). Production of the two most important species (yellowfin and skipjack) has increased by about 10 percent per year during this period. Production of bigeye tuna has not changed very much, that of albacore has decreased slightly, and both northern and southern bluefin have decreased sharply.

During this period of increasing production, there have been many changes in the traditional patterns of fishing. The two most important and productive tuna fishing areas were historically the eastern Atlantic and the eastern Pacific, particularly the latter; they supported the largest surface fisheries for tunas in the world. These areas are still extremely important, and catches continue high; however, in the late 1970s U.S. purse-seine vessels from the eastern Pacific began to exploit the western Pacific, where traditionally longline fishing predominated, as it did in the Indian Ocean. By 1983, the western Pacific had became the leading area in tuna production, a position it continues to hold. Similarly, but slightly later, French and Spanish purse-seine vessels that normally fished along the coast of western Africa began to fish in the Indian Ocean. There they found abundant concentrations of tunas, and within a few years the production from the Indian Ocean nearly doubled.

On a smaller scale, a relatively new longline fishery for tunas has developed along the east and Gulf coasts of the United States. This fishery catches mostly yellowfin, which is sold on the lucrative fresh fish market. Although catches are small (less than 10 thousand tons per year), they are economically significant.

Much of the increase observed in overall tuna production during the last decade has been due to these shifts to new fishing areas. Whether these trends continue in the same direction or not will depend on a number of factors: how abundant the stocks of tunas are, how heavily they are fished, how this fishing affects their abundance, and whether the nations involved in the fishery can cooperate in order to manage the resource effectively.

Like other living renewable resources, the rate at which tunas are harvested affects their ability to sustain future exploitation. Overfishing can take two forms, growth overfishing and recruitment overfishing. In the former, the fish are caught when they are too small, reducing the potential biomass and thus the potential yield; in the latter, too many fish are caught, reducing the biomass of potential spawners, resulting in fewer births and thereby lowering future catches. Generally speaking, if the rate at which they are harvested is greater than that at which the population can increase (the natural replacement rate),

then abundance decreases, as does catch. If they are harvested at a rate well below this replacement rate, then the total catch will also be lower, but abundance will increase; if harvested at a rate approximately equal to the maximum natural replacement rate, high catches can be sustained and the abundance will be unaffected. In practice, the rate at which tuna resources are harvested will depend both on economic factors and on how well governments are able to manage the fishery.

The migratory nature of tunas means that management measures must apply over the entire range of a stock if they are to be effective. Action by one or more nations that applies to only a portion of a stock's range will not work: if catches are limited in one area but not elsewhere, then such controls will not succeed in conserving the resource. Little is accomplished by protecting the resource in the coastal zone if it is overfished on the high seas. The only way to conserve and manage stocks of highly migratory species is through international cooperation between the coastal states through whose waters the tunas pass and those nations whose fleets participate in the fishery.

This reality was acknowledged in the recently signed Third United Nations Convention on the Law of the Sea, in which the highly migratory nature of tunas and billfishes is recognized, and they are afforded special status with respect to management requirements. Article 64 of that Convention states:

> "The coastal State and other States whose nationals fish in the region for the highly migratory species listed in Annex I shall cooperate directly or through appropriate international organizations with a view to ensuring conservation and promoting the objective of optimum utilization of such species throughout the region, both within and beyond the exclusive economic zone [EEZ]. In regions for which no appropriate international organization exists, the coastal State and other States whose nationals harvest these species in the region shall cooperate to establish such an organization and participate in its work."

It is not only the migratory nature of tunas that makes international cooperation in their management necessary. The vessels that fish for tunas are even more mobile than the fish. They must follow the tunas wherever they go, and during a single voyage a typical tuna vessel may travel more than 10 thousand miles, operate in the waters of several nations, and in the course of a year fish in more than one ocean. Many nations have tuna fleets, and even if the quarry were not highly migratory, international cooperation would be necessary to manage the highly mobile fleet on the high seas.

Given the migratory behavior of the fish and the international nature of the fleet, a number of requirements must be fulfilled before management can be effective. First, information is needed on the abundance of the stock to be managed, the amount of catch taken from the stock, and the effect of this exploitation on future abundance. In order to do this, detailed data on the activities of the tuna fleets must be collected through some form of coordinated program; this data must then be processed, evaluated, and analyzed. Because the fish and the fleets are spread over vast areas, the program must cast its net very wide; and, since the fishery covers both national and international waters, cooperation among nations is essential if the program is to achieve the desired ends.

Once the quantity of tuna available for capture has been determined, the next requirement is to decide how that catch should be allocated, not only among nations but also among interested parties such as recreational fishermen and commercial fishermen. This has always been a contentious and difficult subject, and cooperation among everyone involved in the fishery is essential if realistic and lasting solutions are to be found. Numerous attempts have been made at allocating the limited resources of tuna among nations, and the common feature in all successful cases has been that the allocations were based on some formula that took into account the concentration of the resource within the EEZ of the nation in question and its historic involvement in the fishery.

Once a national catch allocation is assigned, the national fleet must be able to go to wherever the fish are; in other words, there must be access to the resource. This applies to both coastal and distant-water fishing states. Because of the migratory nature of tunas, their concentration or availability in any given section of the fishery is extremely variable. For example, the average annual catch in a nation's EEZ may be 10,000 tons, but the actual amount available might vary between 1,000 and 20,000 tons from one year to the next. If that nation's annual catch allocation were 10,000 tons, based on the average catch, then in many years its fleet would have to fish on the high seas or in the EEZ of another nation or nations in order to make up the difference. All manner of difficulties could result if it were denied access to these zones. Providing adequate access to the resource for all participants in the fishery (perhaps through an international licensing system) will once again require international cooperation.

There are currently only two international organizations with specific responsibility for the scientific study and management of tuna resources. These are the Inter-American Tropical Tuna Commission (IATTC), whose mandate covers the eastern Pacific Ocean, and the International Commission for the Conservation of Atlantic Tuna (ICCAT), responsible for the entire Atlantic Ocean and adjacent seas. These two bodies operate somewhat differently, but share the same basic objective: to recommend to the governments of nations which participate in the fishery, on the basis of scientific studies, measures designed to ensure that the stocks of species for which they are responsible are maintained at levels which can support high yields on a sustained basis.

The older of these organizations, the IATTC, was established in 1949 by a treaty signed originally by Costa Rica and the United States. Membership has fluctuated between two and eight nations, and stands currently at six. In order To carry out its responsibilities, the Commission employs a staff of scientists, recruited from many countries, who design and carry out the research programs. Through these programs the Commission has established and maintained the most complete data base for any tuna fishery, and indeed one of the best for any fishery anywhere. This data base forms the basis of the Commission's research, which has produced more than 500 scientific articles on tunas, and given rise to an unsurpassed understanding of the biology, ecology, and population dynamics of tunas. Based on its scientific studies, the Commission staff recommended management measures for the yellowfin stock of the eastern Pacific, which had previously been over-exploited. The conservation program, which limited catches by means of an overall catch quota, was implemented each year from 1966 until 1979. The program was very successful from a biological point of view, in that it maintained the abundance of the stock at high levels. During this period the tuna fleet of the eastern Pacific consisted predominantly of U.S.-flag boats, which took most of the quota and bore the brunt of the management program. However, in the mid-1970s the coastal Latin American states began to build up their fleets and expand their jurisdiction seaward to 200 miles. As these

fleets developed, these states demanded that the resource be allocated on the basis that historically about one-half the catch in the eastern Pacific came from within their EEZs. Despite extensive negotiations, the United States and the Latin American states could not reach agreement on a proposed management system that included an international licensing scheme and allocations based on the adjacency of a nation to the resource, and the negotiations collapsed in 1979. This political failure meant that the conservation program could no longer be implemented, and the coastal states began to restrict access to their EEZs. There followed a period of declining catches and abundance; many vessels, most of them U.S.-flagged, left for the western Pacific. The ensuing drop in fishing intensity in the eastern Pacific, coupled with favorable environmental conditions, has led to an increase in abundance of yellowfin during the last few years. However, although abundance is presently high and catches are good, fishing effort in the eastern Pacific is increasing. If the yellowfin stock is to be maintained at a high level, a management scheme will once again be necessary, but before the nations involved will agree to any such scheme, it is clear that the three critical requirements - availability, allocation, and access - will need to be addressed.

Several attempts to resolve these problems have been initiated in the eastern Pacific over the last few years. These have included increasing the scope and responsibility of the IATTC to enable it to deal with these problems, and creating a new entity to assume responsibility for allocation and access. All these attempts have concurred on one basic principle: tunas are highly migratory, and whatever institutional arrangements are agreed to, they must incorporate international cooperation. All governments recognize that unilateral management is not now, and cannot be, effective.

ICCAT was established in 1969. Its objectives, like those of the IATTC, are to conduct scientific studies of the tuna and billfish stocks of the Atlantic Ocean and, on the basis of these studies, to recommend measures for maintaining the populations at levels that can support maximum yields on a sustained basis. However, unlike the IATTC, ICCAT bases its stock assessments on research conducted by government scientists from the member nations. Its very existence provides a strong stimulus for this research and for the collection of data on the tuna and billfish stocks of the Atlantic, and this has resulted in the compilation of a substantial data base and studies of the effect of fishing on these stocks. On the basis of such studies, conservation measures for tunas were implemented within ICCAT.

For yellowfin tuna, limits were set on the smallest size of fish that could be taken. The objective of this measure was to increase production from the yellowfin stock by allowing these small fish to grow to larger sizes before being captured. In this way the total volume of the catch could be increased without increasing the numbers of fish caught and thus depleting the stock. These measures were only partially successful, mainly because of the difficulty of ensuring that small fish were not taken.

The other species regulated by ICCAT is bluefin tuna. This species is not caught in large quantities, but the fishery is nonetheless of great importance. Recreational fishermen have always directed a great deal of effort towards the species, and it is important to commercial fishermen because it commands an unusually high price in the fresh fish market. Early in the history of ICCAT, scientific analyses indicated that the resource was being severely affected by growth overfishing. Because bluefin is a potentially long-lived, rapid-growing species, the loss of potential biomass yield is great when individuals are harvested at a young age. These analyses also suggested that the spawning stock

of larger fish had been reduced enough to reduce recruitment of young fish into the fishery.

In 1975, two ICCAT conservation measures for bluefin were adopted in an effort to correct the problem of growth overfishing and to protect the stock against recruitment overfishing. Both of these measures applied to the bluefin stock throughout the entire Atlantic Ocean. The first measure established a lower limit of 6.4 kilograms on the size of bluefin that could be taken; the second limited fishing mortality to then current levels. The effect of these two measures appeared to be minimal, and in the western Atlantic abundance continued to decline. Scientists speculated that this might be due to the fact that bluefin from the western Atlantic did not mix as completely with those from the eastern Atlantic as had been believed. New scientific evidence suggested that even though east-west interchange across the Atlantic took place, it was low enough and variable enough that management measures applied only on one side of the Atlantic would have their greatest effect in that area. Armed with this information, ICCAT recommended new regulations that took effect in 1982 and limited the 1983 bluefin catch to approximately 2500 tons. By agreement among the nations involved, this catch was allocated among Canada, Japan, and the United States. This regulatory program now appears to have had a favorable impact on the western Atlantic bluefin stock. Numbers of young (1-5 years) and medium (6-9 years) age fish appear to have increased from earlier severely depleted levels, and this recovery is expected to continue in the future.

It appears that the nations involved in the tuna fisheries of the north Atlantic have achieved a viable management regime within the framework of ICCAT through extensive international negotiations. However, in spite of this success, there have also been difficulties. There is still a need for more complete data on the eastern Atlantic bluefin fishery, particularly catch statistics and size composition data from the Mediterranean, and also for a more intensive analysis of the bluefin stock in that area.

The problems surrounding the management of the Atlantic swordfish fishery are likely to prove more difficult for ICCAT to solve. This species is distributed continuously across the north Atlantic and is fished by a number of nations. Most of the catch is taken outside the 200-mile limit. Because of this ocean-wide distribution of the fish and the fleet that harvest them, plus the fact that the fish move in and out of jurisdictional zones, management must be international, and must include all the participants in the fishery, both coastal and distant-water fishing states. Recent unilateral initiatives by some states to set catch limits within their 200-mile zone will not be very effective. ICCAT is a viable international conservation body with a proven track record, and should have the task of making management recommendations covering the entire range of the resources within its mandate.

ICCAT's role is restricted by financial difficulties, arising from the non-payment of contributions by some member nations. This situation has worsened during the last few years, and needs to be resolved.

In two major tuna fishing areas, the western Pacific and the Indian Oceans, there are no international bodies with responsibility for the scientific study and management of tunas. Both of these areas support very large fisheries, and catches appear to be increasing. With one notable exception, there presently appears to be no short-term danger of overfishing the resources in these areas, but the data on which this conclusion is based are limited, and one cannot be certain. There is a definite need for the establishment of an international body or bodies devoted to the study and management of tunas in these two areas.

In the case of the Indian Ocean, the nations of the region and some of the distant-water fishing states whose vessels fish there have declared their intention of establishing an organization of the type called for by Article 64 of the Law of the Sea Convention for the study and management of tunas. In their deliberations they have recognized that no nation can successfully perform this task on its own. Judging by present progress, it is probable that an international body for managing tunas in the Indian Ocean will become a reality in the not-too-distant future.

In the western Pacific the picture is more confused. When the surface fishery began to develop in that area in the late 1970s, efforts were made to establish an Article 64-type body. This effort failed, partially because many of the coastal countries involved had just become independent or were about to do so, and having so recently won independence and jurisdiction over their adjacent seas, they were very wary of doing anything that might be perceived to diminish this newly-acquired jurisdiction. Instead they established the Forum Fisheries Agency (FFA), to serve as an agency through which the island nations of the western Pacific could coordinate the exercise of this sovereignty over the sea, and in conformity with the developing body of law being codified in the Third United Nations Conference on the Law of the Sea. Because tunas are one of the major resources of the region, the FFA concentrated its efforts on coordinating the activities of its members in formulating access agreements with distant-water fishing nations; its role did not extend to the scientific study or management of tunas.

Concurrently, the South Pacific Commission (SPC), an international body made up of the island states of the western Pacific and other states with colonial and/or territorial ties to the region, and responsible for conducting programs for improving the standard of living in the area, undertook a program to study the biology and abundance of tunas of the region. Although their programs were quite successful with respect to studies of the movements of tunas, they were unable to set up a data system that included comprehensive catch statistics and other information on the fishery, mainly because most of the nations fishing in the region were not members of the SPC and therefore had no incentive to provide data. The recent access agreements between the United States and 16 of the nations of the western Pacific require that catch statistics be submitted, so data collection has improved somewhat, but there are still fleets that do not provide data.

There is in my opinion a need for an international body in the western Pacific with responsibility for the scientific study and management of tunas, to which both coastal states and distant-water fishing nations would belong. Although the tuna stocks of that region do not appear to be overfished, both effort and catches are increasing rapidly, and this situation may not hold true for much longer. Information needs to be collected and analyzed for the entire range of the fishery. As in the eastern Pacific, Atlantic, and Indian Oceans, the migratory nature of tunas and the mobility of the fleets must be taken into account if the resources there are to be husbanded for the long-term benefit of the peoples of the region. To achieve this will require universal acceptance of Article 64 of the Third United Nations Conference on the Law of the Sea.

Another cause for concern is the stock of bluefin tuna which occurs in the southern hemisphere. This species originates in the spawning grounds of the Indian Ocean off western Australia, and pass through the coastal waters off southern Australia during their first 2 to 4 years of life. As they continue to grow, they migrate onto the high seas where they are found widely distributed throughout the Pacific, Atlantic, and Indian Oceans. Three nations - Australia,

Japan, and New Zealand - harvest this species. Historically, Japan was the only nation fishing southern bluefin, taking large catches of large fish. Later, Australia entered the fishery, intercepting the younger fish before they migrated onto the high seas; those that did reach the high seas continued to be fished by the Japanese. Catches declined rapidly due to reduction of the spawning stock and the large numbers of young fish caught, and total catches are currently only a small fraction of what they once were. Australia attempted to manage the stock unilaterally, but their regulations were ineffective because they only applied in the waters of their EEZ. Scientists are so concerned about a complete collapse of the stock that they have called for a 10-year moratorium on the catch of southern bluefin tuna. This situation provides a classic example of the failure of unilateral action to manage tunas, and highlights both the need for international management and the wisdom of the drafters of Article 64.

Concluding remarks

In closing, I would like to reiterate some of my earlier observations and add a few new thoughts about institutional arrangements.

The last two decades have witnessed a great expansion of the jurisdiction of coastal nations over the seas. This came after nearly four centuries of unrestricted exploitation of many of the oceans' resources, in which time coastal nations saw many of the living resources of the sea adjacent to their shoreline overfished by other nations. With their newly-acquired jurisdiction, coastal states were able to control access to their waters, and thereby initiate conservation of the resources that lay therein. In some cases, and particularly for species resident within their jurisdictional zones, the coastal states have been able to maintain resources at levels that provide maximum benefits to their citizens. In the case of species which spend only a part of their life within these jurisdictional zones, this unilateral management approach has not worked in the past and cannot work in the future. The proper management of these species will require the cooperation of all nations in whose waters the resource occurs and of all nations who harvest the resource. This type of approach is not greeted with enthusiasm by many coastal states. Having only recently acquired jurisdiction over large tracts of ocean adjacent to their coastline, they are reluctant to take any action that might be perceived to diminish such jurisdiction. However, in the long-term interests of both their citizens and the resource, nations must be willing to enter into international agreements with their neighbors and trading partners. They must be willing to exercise their sovereignty and jurisdiction through international fora which are both responsible for and capable of managing highly migratory species. Failing this, any long-term national objectives regarding the development of commercial fisheries for these resources or reserving them for recreational use, or any other management objectives, cannot be achieved.

As we have noted, there are presently only two international bodies with responsibility for the management of tunas, ICCAT in the Atlantic and the IATTC in the eastern Pacific. Both these organizations have long histories of research and management; they have enjoyed a great deal of success, but have also suffered some failures. They need to be re-examined in the light of the new realities of the Law of the Sea, and improved where necessary.

No similar institutions exist for other ocean areas, but nations interested in the tuna resources of the Indian Ocean have commenced negotiations to draft a treaty for the management of highly migratory species there. In the western central Pacific, which supports the largest catches of tunas in the world, there

is no single organization responsible for the scientific study or management of tunas. Similarly, in the case of southern bluefin tuna, there are no institutional arrangements for evaluating and putting into effect the recommendation that fishing should be halted entirely.

In retrospect, then, it is clear that there is a strong need to improve current international organizations for tuna management, and create new ones. If these new institutions are to be effective in managing highly migratory species, their mandates will have to include a number of important concepts, among them the following:

(1) Stocks of highly migratory species must be managed over their entire range; management over only a portion of that range cannot be effective.

(2) The basis of management must be an understanding of the biology and population dynamics of the stock, its abundance, and the effect of fishing and the environment on this abundance. Such understanding derives from scientific study, which must obviously apply over the range of the stock.

(3) The new realities of the Law of the Sea must be taken into account. The rights of coastal states with respect to their jurisdiction over waters adjacent to their coastline must be considered.

(4) The mobility of the fleets harvesting tunas, their need to follow the fish to where they are most abundant, the adjacency of coastal states, and the historical involvement of distant-water fishing nations must all be integrated into an acceptable system of access.

(5) The economics of fishing must be considered. When fleets become badly out of balance with the capacity of the stock to support them, economic problems develop. It then becomes difficult, if not impossible, to maintain cooperation. Systems for ensuring that fleet growth is commensurate with the capacity of the stock need to be developed.

(6) Enforcement of conservation measures and regulations must be equitable and uniform if management is to be effective.

If and when international bodies for the management of highly migratory species are instituted, they should coordinate their programs through some sort of umbrella organization or governing council. There are several reasons for this: the management problems of highly migratory species are similar in all oceans; many of the same vessels fish in more than one ocean area, and indeed in more than one ocean; management action taken in one area will often have an effect in another area; and, finally, the scientific work involved is similar in all areas, and involves many of the same people and national organizations. All in all, the problems of tuna management are global, and the institutions that address them should also be global. This is a big step, and cannot be taken all at once. If a global institution were considered desirable and possible, it would have to be built up from a series of regional bodies.

If the highly migratory species are to be managed effectively and their continued abundance ensured for the benefit of future generations, compromises on the part of all nations will be necessary. These compromises need to be based not only on customary international law, but also on the laws of Nature.

Thank you.

FIGURE 1. World catch by ocean of the principal market species of tuna, 1987.

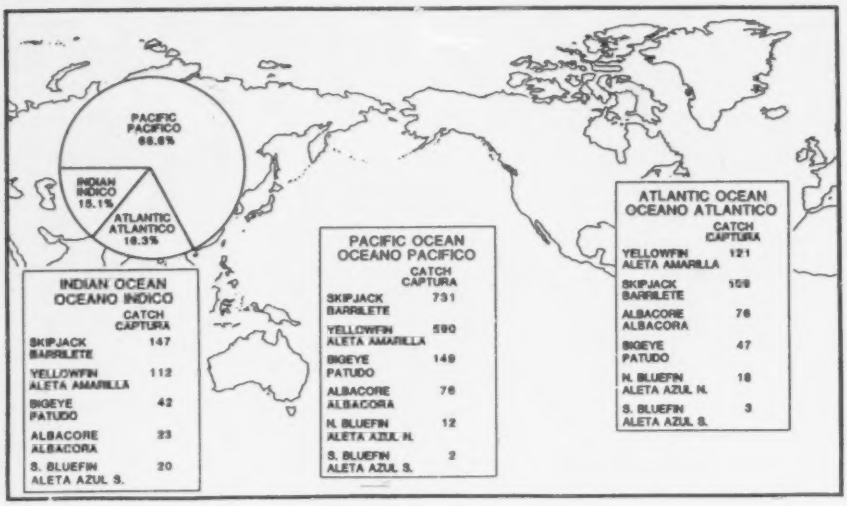


FIGURE 2. Percentages and amounts of the total catch of principal market species taken by the fishermen of various countries in 1987.

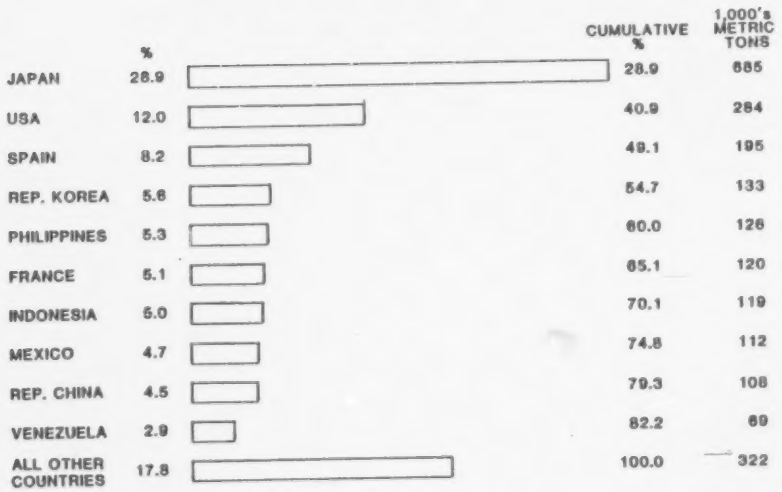


FIGURE 3. Trends in world catches of tuna.

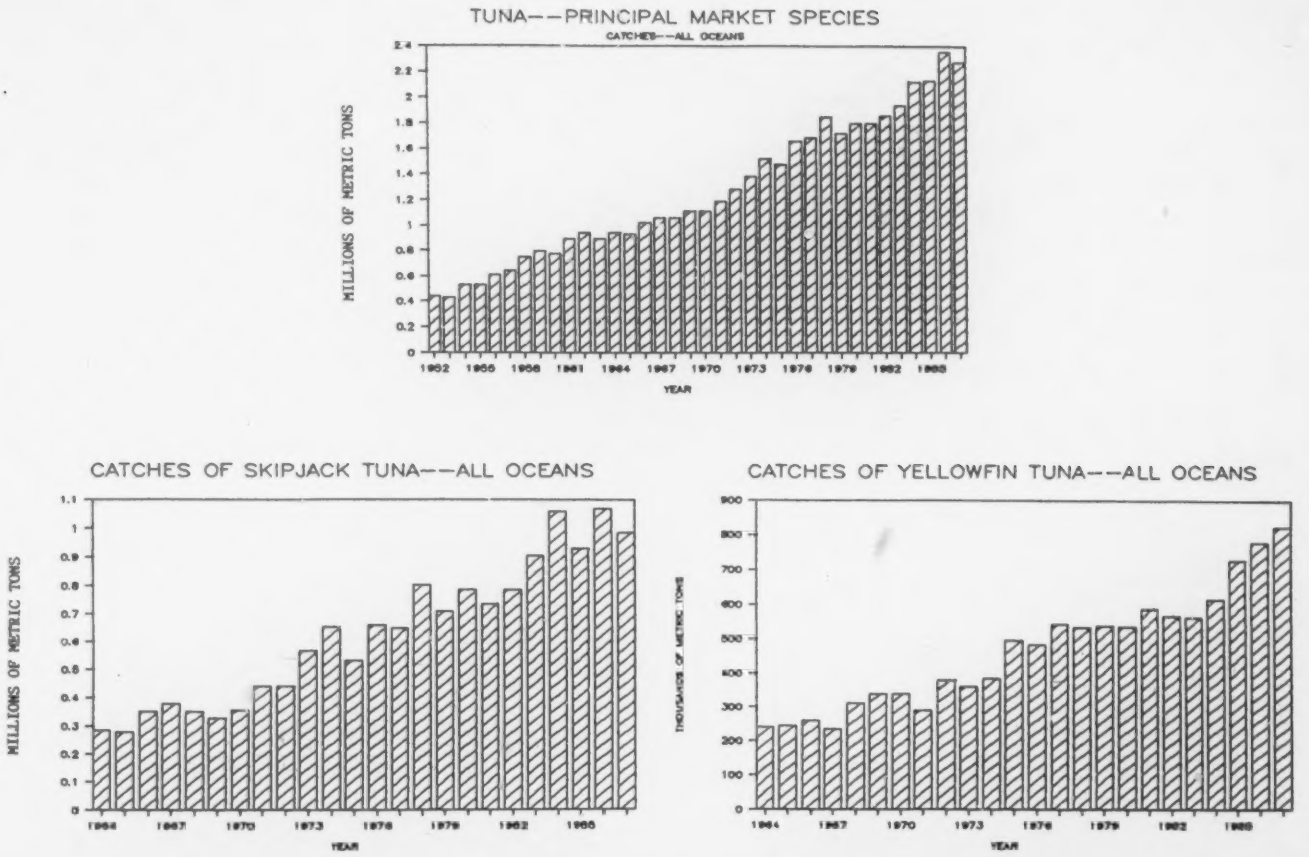
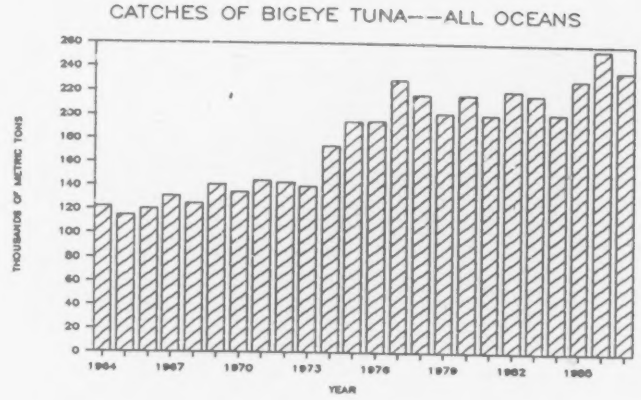
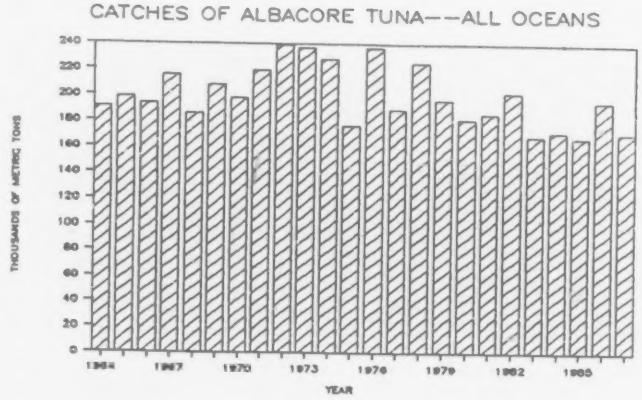
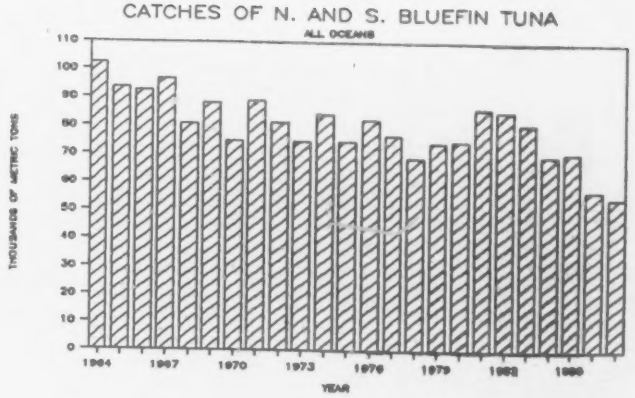


FIGURE 3. (Continued)







Senator INOUYE. Then am I correct to conclude that you are against inclusion of tuna in the Magnuson Act?

Dr. JOSEPH. I did not say that. I do not care to make a statement on that, Mr. Chairman, because, as I told you, I am a scientist. My interest is in managing tunas and tunas have to be managed internationally.

Senator INOUYE. So, in your mind, if the inclusion does not in any way detract from international management, it is okay?

Dr. JOSEPH. As long as we can have international management for tunas.

Senator INOUYE. What are your assessments as far as the use of drift nets in harvesting tunas in the Pacific?

Dr. JOSEPH. Well, Mr. Chairman, unfortunately, we do not know very much about the harvest of tunas with drift nets. We only know that they do catch tunas both in the South Pacific and in the North Pacific. We really do not know how many they catch. There is some indication that they do catch large amounts of small tunas in the North Pacific and that could, in fact, affect recruitment into the surface fishery in the eastern Pacific. But we are not certain of that.

Up until this year, until this became a popular issue, conclusions of scientists working on North Pacific albacore were that they were in pretty good shape and that they were under what is called the maximum sustainable yield. It is only since the gill net issue that there is a lot of concern now.

I do not know what the effect of gill-netting on tuna stocks is. But, Mr. Chairman, I would say that gill-netting obviously creates a lot of problems because it not only goes after the object species, which is, let us say, squid, in one area, or albacore tuna in another. But it catches a lot of other things. There are by-catches of other species of fish, marine mammals, birds, et cetera. Another problem that we have to deal with is that many gill nets break loose and continue fishing for a very long time, catching fish that nobody is going to retrieve.

Now, people can make a decision one of two ways, I would think. One could say, philosophically, gill nets are bad. We do not need to know whether they do damage or not; we just make a decision that we stop gill-netting. The other way is we can say that, "Well, gill-netting may be a problem; we do not know. Let us find out what the problem is." Being a scientist, that is the way I operate: let us find out how the world is put together and let us make a decision on that.

So what needs to be, in my opinion, done, Mr. Chairman, is a full-force effort made at finding out what the effect of gill-netting is on species other than the object species.

Senator INOUYE. And, in your mind, we do not have enough information to make any conclusions or assessments?

Dr. JOSEPH. I do not, no.

Senator INOUYE. I thank you very much, sir, and may I now call on Mr. Paty.

STATEMENT OF WILLIAM PATY, CHAIRMAN, WESTERN PACIFIC FISHERY MANAGEMENT COUNCIL, HONOLULU, HI

Mr. PATY. Thank you, Mr. Chairman. As chairman of the West Pacific Fishery Management Council, I am privileged to speak to the committee on behalf of the five regional fishery management councils which favor the inclusion of tuna under the Magnuson Act.

Although each council has different concerns about this issue, we share the frustration of not being able to properly conserve and manage pelagic fishery resources. This frustration results from the existing tuna exclusion policy. My testimony comes from the central and western Pacific perspective, but it covers problems that our council has in common with regional councils on the Atlantic coast.

With me today is Dave Borden, the chairman of the New England Council, and Jim McHugh, chairman of the Mid-Atlantic Council.

Domestic tuna fisheries in the U.S. EEZ have developed substantially since the enactment of the Magnuson Act. Tuna were excluded from the act at the time; the U.S. coastal tuna resources were of little importance to domestic fishermen. Thousands of U.S. fishermen now depend upon tuna stocks within our EEZ for their livelihood. The appearance of fresh tuna in increasing amounts in domestic restaurant menus reflects a growing demand. You well know the increase in the demand for shashimi.

A dozen years ago, only 8.5 percent of the tuna catch was in the EEZ and today it is up over 22 percent. Today there are over 8,000 commercial boats, full-time and part-time, and this is substantial. In addition to that, there are many times that number of recreational boats.

The exclusion policy severely impedes the council's ability to conserve and manage fisheries for other large pelagic species such as swordfish, marlin, mahi-mahi and shark. These species, such as swordfish, are non-tuna species and many of them are just as migratory as tuna. More importantly, they are caught with the same gear and by the same fishermen who harvest tuna.

The multi-species nature of pelagic fisheries leads to severe complications when trying to collect data necessary to properly monitor fish stocks. We simply do not know how tuna stocks are responding to domestic fishing pressure. Swordfish and marlin stocks around the nation are now showing signs of abuse. We can barely begin to properly assess the stocks because we are constantly reminded that we cannot do anything that might affect tuna fishermen, the very fishermen who are catching many of these other species. We must remember that managing a fishery means the entire fishery, from the fish population to the people that harvest the fish.

More than one-half of the world's fish catch comes from the Pacific Ocean. And we have there a chart that shows you that. The tuna fisheries in the central and western Pacific are increasingly international in character. Dr. Joseph attests to that. Tuna exclusion no longer shelters the long-range U.S. tuna fleet from paying the right to fish in other nations' EEZ's.

As chairman of the Western Pacific Council, I have the opportunity to observe tuna fleets and landing operations all over the American flag Pacific islands. There is obviously an increasing international character to this industry, and the sharp lines that used to define the U.S. tuna industry are now becoming less distinct, especially with the signing of the South Pacific Tuna Treaty.

So, given the current fishing pressures in the waters of the western Pacific—and you have had testimony on the effect of the gill-netting, both in the North Pacific and the South Pacific—and given the sophisticated gear, with the possible exception of skipjack tuna, in my opinion, it will only be a matter of time before the pelagic stocks, including other tunas, will be overfished.

You simply cannot maintain that kind of pressure for that period of time, with gill-netting and these other vessels, and not have some adverse impact on stocks. The evidence is mounting. There is now no international agreement in the western Pacific that in any way addresses this problem. We look to the day when there will be an international agreement. We hope it will not be too late in coming. Oftentimes, we wait until it is right down at the bottom, then they say, "Oh, yes, we have got to come together and do something." We need to move now.

But we are saying this: for now, let us come together and take the responsibility of managing a pelagic fishing effort within our EEZ. We do not have to wait until the international agreement starts. We are concerned about a resource that is close to us and needs to be considered and managed.

The U.S.A. is the last nation in the Pacific and one of the just two coastal nations on the planet refusing to adopt and recognize domestic management of tuna. Despite the U.S. policy of not accepting other countries' claims to tuna resources within our EEZ, we, last year, as you know, signed the South Pacific treaty with 13 Pacific Island countries, which pays $12 million a year for 5 years for tuna fishing rights within the EEZ's of these nations.

By signing the treaty, the U.S.A. recognizes the domestic tuna claims by nations in the central and western Pacific oceans. Unfortunately, the closer association that American Samoa, Hawaii, Guam and the Northern Mariana islands have with the U.S.A. may be viewed as a disadvantage by the treaty nations and the rest of the Pacific community nations. Our U.S. flag territories are treated as inferior to other Pacific nations by the U.S. Government when it comes to fishing for tuna. We recognize other countries' rights to tuna but not our own.

And, in addressing this whole picture, in addressing the need to conserve fishery management within our EEZ, the purse-seining industry admits very readily that they only catch less than 10 percent of their entire catch within the EEZ. Now, we say, if that is the case, if it is even less than 10 percent, why, then, is there such a problem of our coming together to see if there is not some basis on which we can begin to rationalize a management scheme?

The U.S.A. has lost some of the prestige it once had in the Pacific region, and it cannot afford to lose any more by endorsing an antiquated tuna policy. Let us move to prove to our neighbors that we respect their tuna resource claims, by not only planning a

treaty with them, but by adopting a similar management position ourselves.

In conclusion, I would like to say that we do favor the reauthorization of the Central, Western, and South Pacific Fisheries Management Development Act. Separate testimony on this will be submitted. We also support the reauthorization of ICCAT, and, on the reauthorization of the Fishermen's Protective Act. While our council has not discussed this, I personally support the reauthorization of this act, because it provides restrictions on importation of fishery or wildlife products from countries that violate international fishery or endangered or threatened species programs.

Thank you, Mr. Chairman. I appreciate the opportunity to share my views on tuna management.

[The statement follows:]

TESTIMONY OF
MR. WILLIAM W. PATY
CHAIRMAN, WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL
BEFORE THE
SENATE COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION,
AND THE NATIONAL OCEAN POLICY STUDY COMMITTEE

July 20, 1989

I am William Paty, Chairman of the Western Pacific Fishery Management Council. I am privileged to speak to this Committee on behalf of five regional fishery management councils which favor the inclusion of tuna under the Magnuson Act. Although each council has different concerns about this issue, we share the frustration of not being able to properly conserve and manage pelagic fisheries resources. This frustration results from the existing tuna exclusion policy. My testimony comes from a central and western Pacific perspective but it covers problems that our council has in common with regional councils on the Atlantic Coast.

Domestic tuna fisheries in the U.S. EEZ have developed substantially since the enactment of the Magnuson Act.

- Tuna were excluded from the Magnuson Act at a time when the U.S. coastal tuna resource was of little importance to domestic fishermen. Only a small percentage of the tuna destined for canning was caught in the U.S. EEZ, and most of the tuna destined for the fresh market was caught by foreign fleets.

U.S. Commercial Tuna Catch in EEZ - Then and Now

1976	1988
$17.0 million	$83.0 million (+ 490%)
8.5% of U.S. tuna catch value	21.8% of U.S. tuna catch value

(Source: U.S. Dept. Commerce/NOAA, Fisheries of the United States, 1976, 1988)

- Thousands of U.S. fishermen now depend on tuna stocks within our EEZ for their livelihood. Domestic fisheries that supply fresh tuna markets have grown at a remarkable pace.

"Americanization" of U.S. EEZ Tuna Fishery - Then and Now

1976	1988
Substantial tuna fishing in U.S. EEZ by Japanese fleet for Japanese consumers	U.S. tuna fleet exports $10 million of fresh tuna to Japan annually

- The appearance of fresh tuna on increasing numbers of domestic restaurant menus reflects the growing demand for tuna species that most of us used to eat only from a can.

Value of Fresh and Frozen (Non-canned) Tuna Produced in U.S. Then and Now

1976	1987	1988
No data available for tuna in 1976	$7.0 million	$12.5 million (1-yr increase of 180%)

(Source: U.S. Dept. Commerce/NOAA, Fisheries of the United States, 1976, 1988)

<u>The tuna exclusion policy severely impedes the Councils' ability to conserve and manage fisheries for other large pelagic species</u>.

- That policy has severely compromised attempts by the regional councils to conserve and manage fisheries for species such as swordfish, marlin, mahimahi and shark.

- These are non-tuna species, and many of them are just as migratory as tuna.

- More importantly, they are caught on the same gear and by the same fishermen who harvest tuna. The multi-species nature of pelagic fisheries leads to severe complications when trying to collect the data necessary to properly monitor fish stocks. The Magnuson Act gives the councils a job to do--manage non-tuna species--but the tuna exclusion policy ties our hands.

- The growing demand for fresh tuna products harvested in the EEZ increases fishing pressure on the resource. Usually

when we see this trend, the councils initiate programs to monitor catches and assess the stocks.

- The tuna exclusion policy, however, has made it difficult for tuna catch data to be collected and analyzed in a comprehensive and coordinated manner, so we cannot see signs of stressed fish populations. We simply don't know how tuna stocks are responding to domestic fishing pressure. Must we wait until stocks of other pelagic species are in the same depleted condition as the North Atlantic bluefin tuna?

- Swordfish and marlin stocks around the nation are now showing signs of abuse, but we can barely begin to properly assess the stocks because we are constantly reminded that we cannot do anything that might affect tuna fishermen, the very fishermen who are catching many of these other species. We must remember that managing a fishery means the entire fishery, from the fish populations to the people that harvest them.

- As long as the tuna exclusion clause remains in the Magnuson Act, fishery managers will be without "eyes and ears" to assess fishing conditions and head off catastrophes. By restricting the councils' ability to monitor stocks and plan ahead, the tuna exclusion policy is increasing the risk of unpredicted fishery collapse.

- Are we supposed to say "Surprise!" to the thousands of fishermen who rely tuna and other pelagic fish? If any stock of any pelagic species collapses, we would lose credibility as fishery managers to the point that the entire management process established by the Magnuson Act would be weakened, perhaps terminally.

More than one-half of the world fish catch comes from the Pacific Ocean (see attachment), and tuna fisheries in the central and western Pacific are increasingly international in character. Tuna exclusion no longer shelters the long-range U.S. tuna fleet from paying for the right to fish in other nations' EEZs.

- As chairman of the Western Pacific Council, I have the opportunity to observe tuna fleets and landing operations in all of the American-flag Pacific islands. There is obviously an increasing international character to this industry and the sharp lines which used to define the "U.S. tuna industry" are becoming less distinct, especially with the signing of the South Pacific Tuna Treaty.

- At home in Hawaii, I see our domestic longline fleet swelled to over 70 vessels by the addition of boats from the west

- When I visit American Samoa, I see American seiners (from a fleet of two dozen boats) and American jigboats (about 40) unloading fish at a U.S.-owned cannery, but I also see a cannery owned by Indonesians buying fish from Americans, and both canneries buying from over 100 foreign longliners and seiners. Yet other foreign longliners transfer super-frozen sashimi tuna in Pago Pago harbor to carriers bound for Japan.

- In Guam, the port is bustling with over 130 foreign longliners unloading tuna destined for Japan.

- At Tinian in the Northern Mariana Islands, a half-dozen or more U.S. tuna seiners transfer fish to foreign-flag carriers bound for Puerto Rico canneries.

- I don't know what business could be more international than tuna fisheries in the central and western Pacific. Any benefits to U.S. fishermen that may have once been attributed to tuna exclusion are now diminished by this international character.

- Given the current fishing pressure in waters of the Western Pacific, given the impact of drift gillnetting, given the sophisticated gear, with the possible exception of skipjack tuna, it is only a matter of time until pelagic stocks including other tunas will be overfished. Evidence of this is mounting. There is now no international agreement in the Western Pacific that in any way addresses this problem. We look to the day when there will be an international agreement. We hope it will not be too late in coming. All we are saying for now is, let us come together and take responsibility of pelagic fishing effort within our EEZ.

<u>The U.S.A. is the last nation in the Pacific, and one of just two coastal nations on the planet, refusing to adopt or recognize domestic management of tuna</u>.

- The Western Pacific Fishery Management Council is responsible for the EEZ around U.S.-flag Pacific islands. Our neighbors are a multitude of small, independent island nations with whom we share a large tuna resource. These nations follow the normal international practice of governing tuna resources within their respective EEZs.

- Despite the U.S. policy of not accepting other countries' claims to tuna resources within their EEZs, we last year signed the South Pacific Tuna Treaty with 13 Pacific island nations, which pays $12 million a year for five years for tuna fishing rights within the EEZs of these nations.

- By signing the treaty, the U.S.A. recognizes the domestic tuna claims by nations in the central and western Pacific Ocean.

- Unfortunately, the closer associations that American Samoa, Hawaii, Guam and the Northern Mariana Islands have with the U.S.A. may be viewed as a disadvantage by the treaty nations and the rest of the Pacific community of nations. Our U.S.-flag territories are treated as inferior to other Pacific nations by the U.S. government when it comes to fishing for tuna: we recognize other countries' rights to tuna, but not our own.

- The U.S.A. has lost some of the prestige it once had in the Pacific region, and it cannot afford to lose any more by endorsing an antiquated tuna policy. Let us prove to our neighbors that we respect their tuna resource claims by not only signing a treaty with them, but by adopting a similar management position ourselves.

Attached are three reports on tuna fisheries in the Pacific.

- The April, 1989, report by David Doulman gives the status of tuna fisheries in the central and western Pacific. It documents the extreme importance of these fisheries, summarizes the activities of distant-water fishing fleets in the region, and describes the changes that are expected there.

- The June, 1988, report by Linda Hudgins documents the rapidly-changing nature of U.S. tuna fishing, especially the increasing value of U.S. coastal fisheries for fresh tuna for both domestic consumption and export.

- The December, 1988, report by Michael Orbach and John Maiolo documents the expanding U.S. coastal tuna fishery and the shrinking U.S. distant-water tuna fleet. Their report also discusses inconsistencies among state, federal and international tuna management provisions.

I have also appended the inter-council position paper which elucidates the reasons why the Atlantic councils favor the inclusion of tuna in the Magnuson Act, and also the minority view against inclusion held by the Pacific Council. We in the western Pacific sympathize with the majority view, and strongly support the position paper. A more detailed summary of the Western Pacific concerns and reasons for tuna inclusion is given in the final attachment.

We are in favor of reauthorizing the Central, Western and South Pacific Fisheries Development Act. Separate testimony on this reauthorization has been submitted to the Committee.

We also support the reauthorization of the ICCAT. This organization has been somewhat effective in controlling the international harvest of Atlantic bluefin tuna. However, I believe that a coordinated effort both domestic and international will enhance and speed up the process for effective management of our pelagic fisheries.

On the reauthorization of the Fishermen's Protective Act, while our Council has not discussed this, I personally support the reauthorization of this Act because it provides restrictions on importation of fishery or wildlife products from countries that violate international fishery or endangered or threatened species programs.

I appreciate this opportunity to share my views on tuna management and other issues and urge you strongly to include tuna in the Magnuson Act.

Thank you.

Senator INOUYE. Thank you very much, Mr. Paty. From your perspective as chairman of the Western Pacific Council, if the Congress should amend the Magnuson Act to include tuna, what plan of action would the Council pursue as far as management is concerned?

Mr. PATY. I think the first thing, and this will take a very substantial period of time, is just to have the right to go out and collect data to get information. We just do not know, and I would expect this would take a very substantial period of time, maybe a decade or more, I do not know.

But I would think that you would not see anything even beginning to resemble a management plan for a very substantial period of time. And then, and only then, would it be approached on the basis of possible restrictions on entry restrictions on catches or something of that sort.

And I think that the concerns expressed by some in the tuna industry—that, for the council to have any sort of management control, the sky is going to fall in—are really ill-founded. I think all we want to do is know more about what we have, and when that is done—and that is going to take some time—then we can take a look at it.

Senator INOUYE. Under the present circumstances, is it not possible for the council to do that study?

Mr. PATY. We do not get the information from the tuna industry relative to their catches at the present time. We do get information on our pelagic species to some extent by reason of the forms that have to be filled out.

But, by reason of their inclusion, we could then go out and require information that would be available to us. And from that standpoint of reporting, we would have that prerogative. But it is difficult, otherwise, to expect people in the commercial sector to make those kinds of reports.

Senator INOUYE. You have stated that your council's inability to manage tuna creates major problems in managing other fisheries for large pelagics like billfish and sharks. One solution may be to include tuna under Regional Fishery Management Council authority. Another may be to exclude all highly migratory species from the regional management system and manage them separately. Would these be feasible?

Mr. PATY. I think, Mr. Chairman, you are looking at trying to maintain a total ecosystem that evolves within our EEZ. And a case can well be made that if they are migratory, they ought to be separate and not be a council responsibility.

We would submit, however, that there is strong evidence that the Atlantic and the New England councils have well documented the problems they have with the marlin and the billfish as a result of their not being able to deal properly with the bluefin tuna.

And I think the two, in many ways, are inseparable. They are one total fishery resource. And it is most difficult, almost impossible, to separate them out and say, well, we take all the large pelagics and move them away. That, I think, is going in the wrong direction, Mr. Chairman.

Dr. JOSEPH. I assume this is a panel and I can speak, Mr. Chairman. I just wanted to make a couple of comments because tunas recognize ecological zones, but not man-made boundaries.

And, really, what we need to do is collect data. And my colleague here is right: there needs to be data collection in all areas. And in the eastern Pacific, under the juridical systems that nations have for the last several years before and after the extension to 200 miles, we have been very effective in collecting data.

And we, I dare say, have the best data base for tunas in the world, and I see no reason why international cooperation in the western or central Pacific should not lead, and, indeed, it must lead, to adequate data bases.

Again, I say that unilateral action with respect to management of tunas, in my opinion, will not work, and I think there is adequate evidence to indicate that. And, likewise, unilateral approaches to establishing data bases over the range and extent of a species or stock of fish will not work either.

Senator INOUYE. I would like to thank you, Dr. Shomura—we will make you a doctor—Dr. Joseph and Mr. Paty, for your contribution this afternoon. You have been very helpful.

Our final panel, we have Mr. David G. Burney, general counsel of the United States Tuna Foundation—Mr. Burney will be accompanied by Mr. August Felando, president of the American Tunaboat Association—and Mr. Fritz Amtsberg of Honolulu.

I have been advised that Mr. Burney will not be able to testify and therefore Mr. James "Bud" Walsh will be presenting Mr. Burney's testimony. We have Mr. Michael Franks, president of the Coastal Seafood Processors, and Mr. Franks will be accompanied by Becky Phillips of Merit Seafoods, with Ms. Gertrude Nishihara of the Hawaii Fishing Coalition and Mr. Peter S. Fithian, chairman of the Hawaiian International Billfish Association.

Mr. Walsh, it is good to have you back with us.

STATEMENT OF JAMES WALSH, U.S. TUNA FOUNDATION, ACCOMPANIED BY AUGUST FELANDO, PRESIDENT, AMERICAN TUNABOAT ASSOCIATION

Mr. WALSH. Thank you very much, Mr. Chairman. I want to mention publicly how much I appreciated your comments about Senator Magnuson. Thank you.

We would like to present the testimony of the U.S. tuna industry on the continuing and never-ending question about whether tuna are highly migratory and whether tuna should be included within unilateral jurisdiction, however we characterize it.

The U.S. Tuna Foundation represents the boat owners, the processors, and the members of the labor union, both ILWU and AFL-CIO, that work in our processing plants. As you know, and you are surely familiar about the industry, we are a worldwide operation, but our vessels supply about 50 percent, of the product that is canned in the United States. Our vessels are looked upon as a major source of supply for the U.S. industry and a stabilizing force in a world market in which, more often than not, the supply is either sometimes restricted or at other times very expensive.

I think what I would like to do, Mr. Chairman, is quickly summarize the testimony, and many of the points have already been hit. But let me begin with the points that we seem to have to argue here.

Point number one is whether tuna are, in fact, highly migratory. Obviously, the term "highly migratory 'is a relative term depending on what kind of fish stocks we are talking about. Most fish stocks tend to move; some move more than others. But it is, I think, unquestionably clear, based on scientific evidence that has been put forward by Dr. Joseph. And while I was the deputy administrator of NOAA, the information I saw from Mr. Shomura's unit out in Hawaii, I was surely convinced that these animals were, in fact, highly migratory.

Secondly, with regard to foreign tuna vessels, it has not been made clear as yet, although I think Ed mentioned it, that there are only two foreign tuna fishing vessels currently operating in the United States. There are none operating within 200 miles of Hawaii at the present time. And we would be glad to submit evidence and information provided by the Department of Commerce with regard to that issue.

William Paty has made some statements on behalf of the councils that there is frustration with regard to the management of billfish and sharks because of the tuna provisions.

Let me begin by saying that you should understand that, with regard to the issue of tuna, we view the councils as fundamentally undemocratic—undemocratic in the sense that, when we established the Magnuson Act, what we did is we made it certain that the fishing industries and the fishing interests of those regions would be represented on the council panels.

As a result, because tuna is not included, you do not see representatives of our industry on any of the councils. Therefore, we think it is not fair to characterize the position of the councils as one reflecting truly the interest of all those who would be managed under a regime which would include tuna. It is also the case, with regard to the NOAA study you mentioned, we were not participants in that study, and, as far as I know, it was never an administration position.

But to make my point about the fact that there is no tuna problems with billfish management, let me simply read directly, if I could, from the memorandum dated January 15, 1982, prepared by William Gordon, then the assistant administrator for fisheries, to John Byrne. The subject was the disapproval of the final fishery management plan for Pacific billfish off the western Pacific. The plan was disapproved.

One of the things that it said in the introduction to this memorandum is that biological conservation is not a purpose or objective of the plan. It is clearly indicated that the FMP, the plan would not have a measurable impact, good or bad, on the overall condition of Pacific billfish stocks. Then it goes on to discuss the tuna issue. And you have heard that the evidence is that it is our tuna position frustrates billfish management.

What they have done here is they have talked about the tuna issue, and what they are saying is that our position has been the direct prevention of high seas foreign fishing for tuna would con-

flict with the current position. And that such restrictions would be justified only by clearly identifiable benefits.

It says, "However, in view of the recent change in the Department of States' position on the effect of the plan on our tuna policy, which is to be more liberal," it says, "I do not intend to use this conflict between the FMP (the billfish plan) and our tuna policy as a primary reason for disapproving the management plan for billfish in the Pacific. Instead, the proposed area closures cannot be approved because they would not meet the necessary and appropriate test of Section 303 of the Magnuson Act."

In conclusion, it says, "the proposed closures are neither necessary nor appropriate management measures because (a) they would not contribute to the conservation of billfish and they would not result in significantly increased domestic catches."

I think we could probably go through a number of other fishery management plans, including the east coast plan, which does nothing more than exclude commercial fishing from billfishing. It does not put a limit on recreational fishermen, and, moreover, there is no requirement of hook and release, and, according to the plan itself, contrary to some information that was put forward this morning, according to the plan itself, over 50 percent of many of the billfishes are put on walls. It is not a conservation program.

Let me go to the next point about the status of bluefin tuna. Obviously, you have heard testimony from both Ed Wolfe and Mr. Blondin that we have got a plan working in the Atlantic area on bluefin and that more work needs to be done and we are conserving that resource by restricting the quota and allocating what is available.

Finally, in terms of tuna policy being a continuing source of international conflict, we do understand and have the same source of concern about what has happened in the central, southern, and western Pacific with regard to the tuna conflict. Many people here today, however, have definitely talked in the past tense. We heard 99 percent of the words about how horrible it used to be. We did not hear very much about how good it is today. I believe that that this committee should undertake to find out what is happening in the central and western and southern Pacific at the moment and how our vessels are viewed.

There is no question that there has been conflict, but we think in many ways it was the kind of thing that, because we attempted to negotiate early, these nations did not wish to negotiate with us originally. We attempted to have private agreements between the tuna fishermen and these entities. Many of them refused to negotiate for any reason. It was not until it did reach a conflict situation, which it often does in matters between countries. And, as a result, we achieved what Ambassador Wolfe has said is a major breakthrough.

Now there probably are lingering feelings about it. But we believe we are doing well and will do as much as we can to become a friend to the people in that part of the world and we will bring the economic benefits that we bring by assisting them in developing their own fisheries.

That concludes my statement, Mr. Chairman. I appreciate the time to deliver it to you.

[The statement follows:]

STATEMENT OF DAVID G. BURNEY
UNITED STATES TUNA FOUNDATION
before the
SENATE COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION
July 20, 1989

Mr. Chairman, on behalf of the United States Tuna Foundation, a non-profit association consisting of U.S. tuna processors, U.S. tuna vessel owners and operators, and U.S. tuna vessel crew members and cannery workers, I want to express appreciation for the opportunity to testify here today regarding a possible amendment to Section 103 of the Magnuson Fisheries Conservation and Management Act (MFCMA) and reauthorization of the Atlantic Tuna Conventions Act.

Presently, Section 103 exempts tuna from the exclusive fishery management authority provided in the MFCMA. The exemption of tuna is predicated on the fact that highly migratory species of fish cannot be effectively managed or conserved in the same manner as standing stocks of fish. Since their annual migrations traverse the juridical zones of numerous coastal states and international waters, tuna can only be effectively managed and conserved through international cooperation.

We are aware that certain recreational fishing interests and the Regional Fisheries Management Councils that they dominate have called for an end to the Section 103 exemption.

They appear to argue that:

* Tuna may not be as highly migratory as once thought.

* Foreign tuna vessels continue to exploit tuna stocks

within the U.S. Exclusive Economic Zone (EEZ), thus interfering with efforts by U.S. commercial fishermen to establish a domestic tuna fishery.

* Both foreign and domestic longline vessels continue to frustrate efforts by regional fisheries management councils to manage billfish and sharks.

* Foreign tuna vessels continue to threaten the status of bluefin tuna that migrate through the Western Atlantic portion of the U.S. EEZ.

* The present tuna policy is a continuing source of international conflict.

Regardless of what may be said, tunas are as highly migratory as ever and management can only be effective if it is maintained throughout the range of the resource (see attachment). No single country claims to have an effective tuna management program. Some countries such as New Zealand and Australia have attempted to partially manage the resource when it passes through their waters by allocating quotas between user groups. These countries do not claim to estimate the maximum sustainable yield of the resource as it passes by on its migratory trek. Their programs are merely aimed at minimizing user conflicts.

Foreign tuna fleets are not exploiting the tuna stocks within the U.S EEZ. Other than a minimal bluefin tuna take (regulated by international quota), foreign vessels (Japanese only) operating in the U.S. EEZ have caught less than 700 tons of tuna annually since 1985. At the same time the domestic commercial longline fleet has continued to increase its catch in the same area, to a point where it has become a prosperous industry. It is only the recreational fishing interests that continue to press for a change in the U.S. tuna policy, not the viable commercial fishing

interests.

The recreational fishing interests concern over the incidental hooking of billfish and sharks by foreign and domestic longline tuna vessels operating in our EEZ is not new. This concern was first raised many years ago and resulted in a 1979 National Oceanic and Atmospheric Administration (NOAA) legal opinion which concluded that U.S. fisheries management plans could contain provisions to regulate foreign tuna operations in our fishery zone, when such operations interfered with U.S. fisheries management plan objectives. As a result of this legal opinion, a number of regulations were implemented under the U.S. billfish management plans. This resulted in a 93% reduction of the foreign longline vessels incidental bycatch. We do not know of any reason why this same approach can't be extended to the domestic longline vessels.

The recreational fishing interests have continually raised concern over the take of bluefin tuna by foreign tuna vessels operating in the Western Atlantic area. In response to this concern, the United States, working through the International Convention for the Conservation of Atlantic Tuna (ICCAT), succeeded in getting international quotas established for these species in the Western Atlantic area. The quotas not only protected the resource, they also significantly reduced the foreign take of bluefin tuna in the U.S. fisheries zone. In 1986 the foreign take of bluefin tuna in the U.S. fisheries zone was 184 metric tons and in 1987 it was 319 metric tons. The U.S. tuna industry, along with representatives of interested fishing groups located along the Atlantic seaboard participated in these ICCAT deliberations and all parties agreed that the ICCAT quotas are an effective conservation tool. There cannot be effective tuna management without the international cooperation that exists within multilateral regimes such as ICCAT. It is for this reason that we strongly endorse

reauthorization of the Atlantic Tunas Convention Act.

Never have the recreational fishing interests been further from the truth than when they claim that the tuna policy is a continuing source of international conflict. To the contrary, our tuna policy has led to one of the most comprehensive pieces of U.S. foreign policy ever achieved in the South Pacific region. The South Pacific Tuna Treaty, negotiated over a period of two and one half years, has been praised by this Congress and the governments of all sixteen Pacific Island countries that comprise the South Pacific Forum.

Recently, the Committee on Foreign Affairs, U.S. House of Representatives, reviewed the regional security developments of the United States in the South Pacific. They concluded that, "The tuna agreement did much to rehabilitate the image of the United States among the South Pacific island states." (Committee Report 95-630, March 1989, p.2.) The report went on to state, "This trend should if possible be continued. In particular the United States should at the appropriate time commence renegotiation of the five year tuna agreement ..." (p.6)

A tuna agreement was also concluded in the Eastern Pacific but was never implemented because of a failure to obtain the necessary number of ratifications. The failure to ratify had nothing to do with the U.S. tuna policy but was the result of other political concerns in the region.

Recently, the United States has commenced discussions with Mexico which could lead to a tuna treaty in the Eastern Pacific similar to the one presently in force in the South Pacific.

To understand the basis of our current juridical position on tuna, it must be recognized that less than 10% of U.S. tuna

production takes place within the U.S. fisheries zone. More than 90% of U.S. tuna production takes place in the Eastern Tropical Pacific Ocean and Western Pacific Ocean, where international agreements are vital to sound resource management and vessel access rights. According to representatives of the Department of State, the U.S. juridical position on tuna is an integral part of their ability to negotiate such international tuna regimes.

In addition, representatives of the National Marine Fisheries Service (NMFS) have testified before this Committee on numerous occasions that tuna can only be effectively managed and conserved through international cooperation. Consistent with this position, the United States has participated in the Inter-American Tropical Tuna Convention (IATTC), the Indian Ocean Fishery Commission, the South Pacific Commission, the Indo-Pacific Fisheries Council and ICCAT, all of which, have regulated tuna on an international basis.

The U.S. tuna industry is proud of the fact that it provides the U.S. consumer with an affordable, high-protein food source. We do not believe that this food source should be placed in jeopardy. Sound resource management and a weighing of the relative economic interests support the need to retain our current juridical position on tuna.

The Committe has also asked that we comment on the need to reauthorize the Fishermens Protective Act (FPA).

We view the FPA as a reaffirmation by the U.S. government that our tuna policy is correct and that the United States intends to maintain a distant water fishing presence. We accept the fact that the FPA is a privilege not a license. No vessel owner desires a seizure since the resulting economic loss can never be fully offset by the provisions of the FPA.

We ask this Committee to continue to support our distant water fishing interests through a reauthorization of this important Act. The South Pacific treaty is proof that faith in our distant water fleet is not misplaced.

Thank you.

During the original talks for the United Nations Law of the Sea Convention in April 1973, the United States submitted a statement entitled "Special Considerations Regarding the Management of Highly Migratory Oceanic Fishes." The statement points out how difficult it is to manage tunas unilaterally. The only rational way to conserve tunas "is in the form of one single co-ordinated quota for the whole area inhabited by the population."

> "If the jurisdictional basis for management of these species did not coincide with their distribution the potential for mismanagement would be great. We might consider the not really hypothetical case of a tuna population which inhabits an area extending into waters over which several nations assert jurisdiction. If each of the coastal States were to set independently a catch quota for the water where it exercises jurisdiction over fishing, and another separate quota were to be established by some other mechanism for the areas beyond national jurisdiction, or if various minimum size limits were set for these various subdivisions of the tuna stock's range, the result in terms of conservation could hardly be very rational or effective. If the sum total of the separate catch quotas happened to be less than the maximum sustainable yield of the stock, conservation would certainly be effected, but there would also be a serious risk of waste of the potential harvest because of the great variability with which tuna become available to fishing in various parts of their range from year to year. For example, a 50,000 ton quota in some subdivision of the range would be meaningless in years when only 25,000 tons become available to capture there, and it would be economically pernicious in years when the same areas offers the possibility of catching 75,000 tons out of a total permissible yield from the stock of 150,000 tons. If, on the other hand, the sum total of the separate quotas happened to exceed the maximum sustainable yield of the stock, overfishing would occur."

> "It seems obvious that the only rational way to apply a catch quota system for conservation of a tuna population is in the form of one single co-ordinated quota for the whole area inhabited by the population. Since the populations do occur in several national jurisdictions and also beyond and they are fished by nations of several countries, the application of such a co-ordinated quota requires international management of the fishery for conservation purposes."

Senator INOUYE. I would gather from your statement that you look upon the negotiations of the South Pacific Tuna Treaty as a successful operation.

Mr. WALSH. There is no question that, from the standpoint of we think everyone involved, it was an extremely unusual treaty. We established a multi-lateral licensing arrangement. The industry is paying, has compromised, we have comprised our position, that is correct. We started with a position of nonrecognition, but we said under the conditions of multi-lateral arrangements that we would agree to pay license fees and to be subject to whatever kinds of restrictions that they would have.

In return for this assurance, we will, number one, have access wherever the fish go; and, number two, that we would not be taxed out of existence, which is a real problem when you deal with many countries, is that they look at an economic activity of another flag.

And there is always a great danger because you are not represented in that country, that suddenly you are looked upon as perhaps the golden goose, that people who do not understand how tenuous this business is, that most of our tuna fleet was operating in the red for 5 or 6 years earlier this year because of the price of tuna.

It is an easy thing to overtax people, and we think the island countries will benefit from our direct aid to help them in building up their tuna activities, as well as from the foreign aid related to the national security aspects of the agreement.

Senator INOUYE. By being a signatory in that treaty, some have suggested that we have tacitly acknowledged coastal state jurisdiction over tuna. What do you say to that?

Mr. WALSH. Well, the response to that is clearly, all countries start with an opening position as to what their policies are. It is the very essence of international cooperation that we achieve compromises. In this case, we took some very theoretical concepts of what sovereignty is and we converted them into a very practical arrangement in which all countries were able to achieve what they desired out of the agreement. And you have been in these discussions, I know, many times, Mr. Chairman, and that is typically the result.

To me, that is generally what policy is about. It evolves, it changes, and it compromises where necessary, so long as you achieve the principal objectives of your negotiations.

Senator INOUYE. We have been told that less than one percent of the catches of the high seas fleet are taken within the United States EEZ. Is that correct?

Mr. WALSH. Yes, 1 to 5 percent. I will let Mr. Felando answer that question further. Most of, if you take the eastern tropical Pacific, let me just, I will run through the numbers, Augie, if that is all right. If we take a look at what has happened in the eastern tropical Pacific, over the last 5 years the amount of fish caught within 200 miles of Latin American countries, from Baja down through Ecuador, it has been, the lowest it has been is 52 percent; the highest is 61 percent.

Particularly in those years when we were unable to locate good schools of yellowfin, we focused on skipjack. Skipjack tends to be found closer to shore, and, as a result, we must go in closer to

shore to obtain them. If we do not have access to those areas, we are forced, number one, to fish on the high seas, which involves something that is very difficult for us, is porpoise fishing.

So, in a way, the 200-mile zone, having closer access, helps us deal with a couple of problem. But there is no question that it is found from 12 to 200.

Senator INOUYE. But is it true that less than one percent of the catches are taken within the American——

Mr. WALSH. Yes. In terms of the purse seining fleet. I think it is a little higher than that in terms of the numbers, and we will submit this for the record. But the amount of fish that has been caught has remained relatively constant, if not been declining, the total amount of catch within the 200-mile zone.

There are statistics, by the way, the fisheries of the United States has a very complete report. And so, as a result, the average since 1985 has been 35 million pounds and outside 200 miles in international waters and other zones has been 541 million pounds. So it is whatever those——

Senator INOUYE. Mr. Felando, in your written statement, you have suggested that the inclusion of tuna in the Magnuson Act would result in reflagging of the U.S. tuna vessels and the closing of domestic processing operations. Would you care to elaborate on that?

Mr. FELANDO. Yes. Number one, I do not know whether it would be reflagging. What would happen is, in my opinion, vessel owners would have to seek sales of their vessels because certainly could not operate under the U.S. flag if there was a change.

We would be forced to leave our traditional grounds, for instance, in the eastern tropical Pacific; you would be forced to fish beyond 200 miles. If we transitted or operated within the 200-mile zones of the 13 countries in the eastern tropical Pacific without a license—and that is a fact, many countries would not issue licenses—then that means that we would not have access to that resource.

Under the changed juridical position, we would be violating not only the laws of those countries, but we would also be violating the Lacey Act. So we would have very severe penalties. And this would constitute a real burden on the economic viability if you were totally dependent on fishing beyond 200 miles.

As to changing flags, where would you go? The opportunity of going to countries that certainly would not offer you protection if you were seized within some 200-mile zone. How many countries, just taking a look at the eastern tropical Pacific—where would you go? Under Panama? Panamanian flag? Under a Costa Rican flag? You face the same problem, that, without access on a regional basis to the resource throughout its range, you cannot maintain a viable operation, in our opinion.

And that is why the, we look upon the Magnuson Act as providing us, providing, rather, the tools to the Department of State, not to us, to be in a position to negotiate multi-lateral arrangements, not only on conservation, as has been done, but also on access.

So what would happen, in my opinion, is that the vessel owners would be forced to take a realistic view as to whether, in fact, they

will be able to operate. And I think the majority of options would be to sell their vessels.

Without the U.S. fleet, a significant supply of tuna from the U.S. fleet, the U.S. canners, whether they be located in Puerto Rico or on American Samoa, would be then practically wholly dependent on foreign sources. And I think that this unreliability of supply, this dependence on foreign supply, would cause a real problem with respect to the maintenance of cannery operations in U.S. territories or, for that matter, in continental United States.

What I am saying, essentially, is a change of the juridical position would create this uncertainty as to our access to the resource as we have had. And this uncertainty would create problems, not only for the vessel owner, but also for the processor.

Senator INOUYE. How successful have you been in your discussions with Mexico and other Latin American countries as far as access is concerned?

Mr. FELANDO. Well, for instance, Mexico does not provide a license system to foreign flag vessels, and of course, their claim is that they have the power to issue or power to deny, or not to have any license system within their 200-mile zone.

To answer your question, specifically, we were, I think, pleasantly surprised in a recent meeting in Mexico where it appeared that there was a basis to believe that the Mexicans and the Mexican Government and the United States Government would work together towards a new multi-lateral arrangement that would take into account not only tuna conservation—a tuna conservation treaty to take care of the issue of not only conservation but allocation. But also the matter of access. In other words, a regional licensing program.

I think the change in the Magnuson Act at this particular time—at this particular time would lead to, in my opinion, a position that if I were a Mexican—now, I have the leverage. The United States has none. And I would really question whether there would be a continued future for the Inter-American Tropical Tuna Commission—not only the issue of the economic viability of the U.S. fleet and the cannery operations.

Senator INOUYE. Thank you very much.

[The statement follows:]

TESTIMONY OF
AUGUST FELANDO
PRESIDENT, AMERICAN TUNABOAT ASSOCIATION
BEFORE
NATIONAL OCEAN POLICY STUDY
AND THE
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE

Hearings on Tuna Management

JULY 20, 1989

Mr. Chairman and Members of the Ocean Policy Study and the Committee:

My name is August Felando and I am President of the American Tunaboat Association ("ATA"). The ATA is a non-profit fishery cooperative based in San Diego, California that represents the interests of owners of long-distance tuna purse seine vessels. For over 50 years, representatives of ATA have participated in international negotiations on tuna management, in trade discussions by the U.S. government over exports and imports of frozen and canned tuna, and in the formulation of national policy with regard to tuna by the Executive and Legislative Branches of the Federal Government.

The 63 member vessels of ATA operate throughout the tropical waters of the Pacific Ocean, from Central and South America to Papua New Guinea. Consequently, the policies that are implemented by the U.S. government are critical to our long-distance fishing operations. There is a long history of

government-to-government negotiations on the question of fishery management, particularly with regard to the highly migratory tunas. It is essential that U.S. tuna policies be supportive of our American tuna fleet. Without supportive government policies, tunaboat owners will face an uncertain situation internationally and would have few incentives to continue operations under the U.S. flag. Moreover, without strong U.S.-based processing companies, the U.S. tuna fleet would not have a market. Thus, national policies that foster tuna fishing and processing have always been especially important to the U.S. tuna industry.

We appreciate the opportunity to appear before you today to discuss (1) the continued exclusion of tuna from Section 102 of the Magnuson Fishery Conservation and Management Act (the "Magnuson Act"); (2) reauthorization of implementing legislation for the International Convention on the Conservation of Atlantic Tunas ("ICCAT"); and (3) reauthorization of Section 7 of the Fishermen's Protective Act ("FPA").

In summary, ATA strongly opposes any effort to assert unilateral jurisdiction over the management of tuna beyond 12 miles by amending the Magnuson Act. We do not see what major national objectives would be achieved by such an amendment and are certain that inclusion of tuna under the Magnuson Act will undercut the efforts of our State Department to negotiate multilateral tuna treaties beneficial to our long distance fleet. ATA supports reauthorization of the domestic legislation implementing the ICCAT. The highly mobile nature of tuna stocks

makes international bodies such as ICCAT essential for the conservation of the species. Finally, we support continued authorization of appropriations for the Fishermen's Guaranty Program under Section 7 of the FPA.

The Magnuson Act

During the initial consideration of the Magnuson Act, Congress decided to exclude any jurisdictional claim to highly migratory species of fish, defined as tunas, within the newly asserted 200 nautical mile fishery management zone. This exclusion of tuna was based on the well-established precept that no nation can effectively manage a fishery resource that travels through the 200-mile zones of several countries. A policy was established in the Magnuson Act supportive of multilateral management of tuna, a policy that was (and still is) consistent with Article 64 of the United Nations Convention on Law of the Sea. That policy is still viable today and in large measure is the reason why the United States was able to negotiate successfully the South Pacific Tuna Treaty. Unfortunately, we have been unable to negotiate a treaty that covers tuna management in the Eastern Tropical Pacific Ocean, our fleet's traditional fishing grounds.

Pursuant to the tuna policies embodied in the Magnuson Act (and President Reagan's Proclamation on the Exclusive Economic Zone), the Department of State has provided continuing U.S. support of the Inter-American Tropical Tuna Commission ("IATTC")

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and ICCAT, two highly valued multinational tuna management arrangements, and has sought to negotiate management agreements with other coastal and fishing nations that allow reasonable fishing access by our fleet. The Magnuson Act includes embargo provisions which come to bear against a nation's tuna exports only if that nation seizes a U.S. vessel on the basis of jurisdictional claims we do not recognize. Such seizures have been rare in the last few years, but they do happen, even when our vessels have simply been transiting some nation's 200-mile zone and not fishing. If a treaty is in place to which the U.S. is a party, then no embargo would occur, so long as the seizure is consistent with the treaty.

Consequently, the Magnuson Act provides a major incentive for nations to come to the bargaining table and discuss tuna management. Without this incentive, we see little reason for a coastal nation to agree to a conservation program that also provides reasonable access for U.S. tuna fishermen. This is especially the case with regard to Mexico, which for some time has been seeking to restrict fishing by our fleet within its 200-mile zone. We hope that one day we can achieve a broadly-based multilateral agreement for managing tunas and for providing access by our vessels near the coastal areas of the Eastern Tropical Pacific.

Recently, various groups have sought to change the Magnuson Act and to remove the tuna exclusion, thereby asserting unilateral management authority over tuna fishing within 200-

miles of the U.S. coast. Those seeking jurisdiction over tuna seem to fall into two groupings: (1) marine recreational fishing groups seeking to restrict competition with commercial fishermen; and (2) people who believe that assertion of jurisdiction over tuna will expand local tuna businesses, for either recreational or commercial sectors. An example of this latter group are certain individuals in Hawaii who have been pushing the issue of including tuna under the Magnuson Act for some time. Also included are certain representatives of the territories of Guam, American Samoa, and the Commonwealth of the Northern Marianas, who, under the umbrella of the Pacific Basin Development Council, recently indicated an interest in amending the tuna provisions of the Magnuson Act.

The establishment of U.S. policies in legislation requires the balancing of various interests. We recognize this fundamental reality. However, what concerns us is the clear trade-off presented by the suggested tuna amendment between our industry's critical reliance on the current Magnuson Act provisions and the vague objectives of proponents for change. We have great trouble determining what will be achieved by asserting jurisdiction over tuna. First, no one has made a case that the tunas off U.S. shores are being overfished, with one exception. The recreational fishing community has said that the commercial catch of yellowfin and bigeye tunas by U.S. long-line fishermen in the Gulf of Mexico and off Hawaii has increased substantially in recent years. The statistics of NOAA Fisheries

indicates that the total 1988 commercial catch of of such tunas by all types of tuna fishing gear in the U.S. 200-mile zone was only about 15,000 tons (as compared to our fleet's 1988 catch of 280,000 tons outside U.S. fishery jurisdiction). This hardly indicates a large fishery that is creating management problems in either the Atlantic or waters off Hawaii. Never has anyone suggested that yellowfin tuna are overfished in the biological sense. The only exception is Atlantic Northern bluefin tuna, which is currently being regulated by NOAA Fisheries pursuant to management controls adopted by ICCAT. Unilateral conservation measures for the Atlantic Northern bluefin tuna simply would be ineffective given the bluefin can be caught outside U.S. jurisdiction. If tunas are not overfished and the one overfished stock is now subject to an international conservation program, what goals are achieved by asserting jurisdiction over tunas?

Second, some have asserted that tuna jurisdiction is needed to conserve billfish stocks. This argument is based on the notion that heavy amounts of foreign fishing occurs for tuna, and billfish are caught incidentally. Yet NOAA Fisheries will report that foreign fishing for tuna in the 200-mile zone at present is minimal at best. In addition, we can assert management controls over billfish in a manner that protects these stocks without unreasonably restricting tuna fishing, and have done so in the past. It makes no sense to assert jurisdiction over tuna simply to make billfish regulations more convenient if other approaches

will achieve the same goals without changing existing tuna policies. Moreover, we suggest that the billfish situation makes the best case for international management of highly migratory fish stocks.

Third, certain groups in Hawaii believe that control over tuna will somehow bring a financial bonanza to commercial and recreational fishermen in that state. Tuna fishing is of importance to the State of Hawaii, but that importance does not appear to be threatened by overfishing or rapacious foreign fishing. According to a recent report by NOAA Fisheries in Honolulu, the important variable in Hawaii's tuna fisheries appears to be "economic factors that have little to do with the conditions of the stocks". These economic factors will continue to be the dominant influence in Hawaiian tuna fisheries regardless of whether jurisdiction over tuna is or is not asserted. Moreover, the reports indicates that availability of tuna off Hawaii varies, without regard to fishing effort but depending on ocean conditions favorable to tuna habitat. This is the very reason why tuna fishermen out of Southern California developed the long-distance tuna bait boats and seiners--to catch the fish wherever they migrate. You cannot ignore biology (and economics) and hope to legislate a tuna fishery into becoming a coastal rather than a high seas activity.

Finally, we are aware of sentiments among some political leaders in American Samoa, Guam, the Northern Mariana Islands, and even Hawaii that all the Pacific Islands should show

solidarity in seeking jurisdiction over tuna. Perhaps some even believe that jurisdiction over tuna will allow them to participate in the South Pacific Tuna Treaty between the U.S. and other island nations. We can understand sentiments about solidarity given the "island way". We do not understand what benefits would inure to American Samoa (where a large portion of U.S. tuna canning is located), or Guam or the Northern Mariana Islands (where tuna transshipping operations occur) because there are no large concentrations of tuna near any of them. The present economic benefits from the U.S. tuna industry to these territories would probably diminish if the Magnuson Act were changed. It is also unlikely that the U.S. would to agree providing treaty benefits to our own territories. It is more likely that U.S. tuna processing operations and fleet basing would transfer to other locations where the economic incentives are greatest, should jurisdiction be altered. Changing the tuna provisions of the Magnuson Act would result in a net economic loss to American Samoa, Guam and the Northern Mariana Islands

In summary, we unequivocally believe that the arguments for continuing the Magnuson Act tuna provisions as they are outweigh the arguments for change. The value of those provisions to the U.S. tuna industry has been well proven in recent years. In contrast, the importance of changing the tuna provisions has not been well articulated nor shown to be the only course open to deal with the problems identified. In these circumstances, Congress should not embrace any change in the tuna provisions of

the Magnuson Act.

Continuance of ICCAT

The ICCAT has been functioning since 1969. The conservation efforts of that body have focused on the bluefin tuna. ICCAT is also a repository of information about tunas and a forum for discussion by 23 countries, each of which has but a limited knowledge of the resource and the industry that harvests tunas in the Atlantic Ocean. Complicated as this international system may seem, it has provided a necessary forum for dealing with tuna conservation issues and has responded where scientific data has indicated a need for conservation measures. We support continued U.S. involvement in this treaty.

The Fishermen's Protective Act

Section 7 of the FPA created the Fishermens Guaranty Program for the reimbursement of certain losses as a result of a seizure by a foreign country pursuant to jurisdictional claims not recognized by the United States. It is administered by the Department of State. To participate, fishermen must enter into an agreement with the Secretary of State and pay an annual fee for the Guaranty. The program has been functioning on the fees collected from fishermen, although the government has made contributions on occasion. Most of our fleet operating in the Eastern Tropical Pacific participates in this program. The need for the program continues so long as we do not have adequate tuna

management treaties in place. This is the case in the Eastern Tropical Pacific Ocean. We urge the Committee to reauthorize Section 7 of the FPA for three years.

* * * * * *

That completes my prepared remarks. I would be happy to answer any of your questions at this time. Again, I appreciate the opportunity to present the views of American tunaboats owners to you today.

Senator INOUYE. Mr. Amtsberg.

STATEMENT OF FRITZ AMTSBERG, COMMERCIAL FISHERMAN FROM HAWAII

Mr. AMTSBERG. Good afternoon, Mr. Chairman. My name is Fritz Amtsberg. I am a commercial fisherman in Honolulu and my testimony, as such, relates to the fishing in the Hawaiian islands.

Tuna species have been the major targeted species since records have been kept in Hawaii. Skipjack tuna are the principal target of the pole and line fisheries in Hawaii. Maximum landings of 16 million pounds occurred in 1965.

However, since the tuna cannery closure in 1984, the landings have decreased to about four million pounds annually. All present landings are consumed locally on the fresh fish market.

The bigeye and yellowfin tunas are principal species targeted by the hand-line and long-line fisheries. The hand-line fishery is made up of smaller vessels and are located primarily off the island of Hawaii and with a smaller concentration of vessels around the island of Kauai. There are several hundred vessels participating in this fishery, and the annual tuna harvest is approximately 3 million pounds.

The long-line fishery, of which I am a part of, is the fastest-growing fishery in Hawaii. In 1980 we had 19 vessels. In 1988 there were 50, and, presently, there are at least 75.

In addition the vessels have increased in size and fishing power and the fishing power of each vessel has almost doubled in terms of number of hooks in the water. The vessels now fish in the EEZ's of Hawaii—Palmyra and Johnson atoll, as well as international waters within a 1,000-mile radius of Honolulu.

The long-line feed production is approximately 5 million pounds per year.

We have a troll fishery that includes full-time commercial fishermen. However, most of the recreational fisherman that sell—most of the recreational fisherman sell their excess catch.

The troll fishery is by far the largest in terms of participation and their annual sales are approximately two and a half million pounds.

Total sale of all pelagic species was around 12 million pounds, with a total of approximately $25 million ex-vessel processed.

Quality tuna is shipped throughout the United States and also exported to Japan. And, essentially, most of the fish is consumed at the local fish market in Honolulu.

There are presently no efforts to manage pelagics in the EEZ's of Hawaii, Palmyra, Johnson, Baker, Holland or Jarvis. And any discussion of pelagic fishery management must acknowledge the fact that they are pelagic and that they are not products of any given EEZ.

Any fishery management plan, written to cover the EEZ's that includes any type of restraint or quota system, is, in effect, only a curtailment of the U.S. harvest of pelagic species.

If there is to be any laws governing the harvest of the pelagics, then they must be on an international level.

I believe the charter of the Fishery Management Council regarding pelagics should be as a negotiator on an international level; as an interface between fishermen enforcement and the general public during any international negotiations; and as an administrator of any international laws regarding pelagics. I feel there is an immediate need to curtail the indiscriminate fishing with nets on the high seas.

Technologically, man is capable of elimination of the pelagics as a renewable resource. Internationally, men must be more selective in the harvest of the species if they are to survive.

Tuna in the Pacific are the most important species and leaving them out of the Magnuson Act is dumb. You either put all the pelagics in it or you take them all out. But you do not have some of them in and some of them out. That does not make any sense.

In addition, it opens our EEZ to foreign fishing. And we have a number of foreign pole and long-line poles that fish predominantly on the Hawaiian archipelago banks beyond French frigate shoals. You do not see them very often—closer in than that.

I am both a long liner for tuna and also I bottom fish for the local bottom fish.

And I have been on banks out near Midway where I have seen seven foreign pole and long-line boats on one bank. And when they jackpole the skipjack onto the boat, they also jackpole whatever comes up.

And there are schools of alua that are unique to certain banks, and our fishery is such that people like myself know who is fishing where. And I happen to know that those alua have disappeared off the bank and there has been no U.S. fishing.

So if you include tuna in the Magnuson Act, or if you manage the species, then you can get this foreign fishing out of our banks. And for me, that is beneficial for the fishermen of the United States in Hawaii. And, therefore, I believe that the tuna should be included in the Magnuson Act and that this will preclude foreign fishing within our EEZ.

And, in addition, by including it, it makes it easier for the Coast Guard to monitor the fishing that is going on, especially on the far-out banks of the Hawaiian EEZ. It is difficult to police it because of the fact that there are foreign boats in there.

As far as the Fishermen's Protective Act, I do not know anything about it and for me to comment on that, I do not think I should.

The Central, Western and South Pacific Fisheries Development Act, as I understand it, is a source of funding for programs to evaluate the understanding of the fisheries. And if that is, in fact, what it is, then I feel that it is beneficial to keep it.

Thank you very much.

[The statement follows:]

TESTIMONY OF
FRITZ AMTSBERG
BEFORE THE
SENATE COMMITTEE ON COMMERCE, SCIENCE AND
TRANSPORTATION AND THE NATIONAL OCEAN POLICY STUDY

JULY 20, 1989

Thank you for having me here today. My name is Fritz Amtsberg. I'm a commercial fisherman from Hawaii. I fish mostly for large tunas using longline gear. Less frequently, I also fish for bottomfish in the Northwestern Hawaiian Islands (NWHI).

Most of my commercial fishing career has been in Hawaii, and I know the tuna fishing industry best there. So much of my testimony will have a Hawaii orientation. I also like to talk with lots of people in the industry; I read most of the trade journals and I am an advisor to the Western Pacific Fishery Management Council. In fact, I helped the Council design its limited entry program for the NWHI fishery for bottomfish. I am also collaborating with tuna scientists at the Honolulu Laboratory of the National Marine Fisheries Service on a study to better understand the habitat and feeding behavior of big eye tuna.

Fishermen, in general, are an independent breed, and most of us are highly individualistic. That is why we have chosen

fishing as a means of earning a livelihood. The fishermen who have been around for a while are seasoned enough to understand and accept the fact that technologically, all fisheries are capable of being overfished and some form of constraint is needed to perpetuate our renewable resources. Today, I'll talk a bit about tuna and their common pasture -- the North Central Pacific Ocean, an area about the same size as the lower 48 States. If we fail to act fairly soon, both at home and abroad, the tuna fisheries of the North Central Pacific Ocean will be irreparably harmed to the long-term detriment of fishermen of all nations who ply their trade there.

There are literally thousands of fishermen in the American islands of the Pacific who chase after tuna. They use vessels and gear ranging from dugout canoes and handlines to large vessels like mine equipped with high-tech electronics and fancy line throwers and pullers capable of setting and pulling up to 40 miles of mainline and several thousand hooks each day. All kinds of vessels and vessel sizes and gear types are used by island fishermen to put fresh tuna on the market.

We have a small fleet of aku (skipjack tuna) boats that are presently catching around four million pounds of skipjack for the fresh fish market. In this colorful fishery, fishermen use chummed live bait to attract schools of skipjack and, sometimes, yellowfin tuna to the boat. The fish, once attracted, are then

caught on feathered lures with barbless hooks attached to stout poles on short lengths of line. The aku boats used to dominate the commercial production of tuna in Hawaii (record landings of 16 million pounds in 1965), but the fishery fell into a serious decline with the cannery closure in 1984. But Hawaii will always have at least a small fleet of skipjack tuna boats because people of Hawaii love to eat, and can afford to eat, fresh aku for sashimi, poki, and other delectable fresh seafood dishes made with skipjack tuna.

There is also a fairly large fleet of boats engaged in the night and day handline fisheries for the larger species of tuna -- mostly yellowfin, bigeye and albacore tuna. The fishing grounds are concentrated off Hilo and the Kona Coast of the island of Hawaii and off of Kauai. Last year, the handline fleet produced about three million pounds of fresh tuna. There are several hundred boats engaged in the commercial handline fisheries for tuna in Hawaii. These range from 20 foot skiffs to 40 foot vessels which also fish longlines. Most handline vessels range from 22 to 28 feet in length. Commercial handline fisheries for tuna are also beginning to take hold, but on a much smaller scale, in Guam, Saipan and American Samoa.

The troll fishery for tunas is the largest of all of our tuna fisheries in terms of participation but this fishery is only quasi-commercial since many fishermen are in it mostly for the

fun, but a very significant portion of them do sell their tuna catches. Collectively they sold about 2-1/2 million pounds of tuna last year in Hawaii.

The last sector of our tuna industry which I want to briefly discuss is the longline fishery. The growth in this fishery has been significant in the last decade. In 1980, there were only 19 longliners plying their trade in Hawaiian waters. In 1985, there were 37. Last year there were 50 longliners operating in Hawaii. At the end of March of this year, there were 64. Now there are probably about 75 longliners home based in Honolulu. About 15 of these vessels were previously home ported in Gulf of Mexico ports. Last year, our longliners produced nearly five million pounds of high quality tuna, much of it marketed and consumed in Hawaii, but also large amounts of premium-grade tuna were exported to Japan for the sashimi market and to most mainland states for use in fancy restaurants, sushi bars and backyard barbecues. Our longline vessels range in length between 40-100 feet. The larger vessels frequently make distant-water trips as far as 1,000 or more miles from Honolulu. Fishing trips can be as long as 10 to 14 days. With proper care and cold storage of fish, the long range longliners bring back quality fresh tuna even on fishing trips of long duration. The smaller longliners make shorter trips and they fish mostly in the 200 mile Exclusive Economic Zone of the U.S.

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I must point out that each of the tuna fisheries which I have briefly described also catch billfish, mahimahi, wahoo and a miscellany of other pelagic fishes. In fact, about a third of the catch of the fishery are non-tuna fishes. Overall, Hawaii's commercial fisheries for pelagic species produced around 12 million pounds of fish last year valued at around $25 million in terms of ex-vessel prices, which is what the fishermen received for their catch. If we bring American Samoa, Guam and the Commonwealth of the Northern Mariana Islands into the picture, the commercial pelagic fisheries of the American islands in the Pacific probably produced close to $30 million worth of fish, valued at ex-vessel prices. If we considered the value added in processing, wholesaling, transporting and retailing of these fish and their attendant economic multiplier effects, then the annual economic impact of the fish catch alone probably approaches $100 million. If we consider the economic impacts of the local commercial fisheries for pelagic species on auxiliary industries such as ice, tackle, bait and gas suppliers, chandleries, distributors of electronic products, bankers, bartenders and the like, then I'd say that we're talking about a quarter billion dollar industry. Year in and year out, tuna make up about two thirds of the total catches of fish made in American islands in the Pacific. All commercial fishermen in the islands certainly have a big stake in the future of the tuna resources in the Pacific.

We are deeply concerned with what the 1,000+ vessel foreign drift gillnet fleet is doing to the tuna and billfish resources right outside of our EEZ in international waters. Commercial fishermen in American Samoa, Guam and Saipan are also worried about the drift gillnetters in their area. The output of all of the local tuna fisheries in the American islands in the Pacific is measured in several tens of million pounds. On the other hand, the output of the vast fleets of drift gillnetters, foreign longline fleets and baitboats and foreign and U.S. purse seiners is measured in hundreds of thousands of metric tons. I read trade journals a lot and my guess is that the annual catch of tuna and other large pelagic fishes made in the Pacific probably now approach about 1,000,000 metric tons per year. When viewed in this context, the catch of pelagic species made by local fishermen in Hawaii is less than one percent of the total Pacific-wide catch of tunas and other pelagic species.

Should the Western Pacific Fishery Management Council be given the authority to manage tuna fisheries in federal waters? I'd say that it all depends on the kind of management that the Regional Council might institute. I think that it would be wrong for the Council to establish limits on the pelagic catches of commercial fishermen in the islands. The species of tuna and billfish and other pelagic fish which we catch are all migratory. All of our tuna and billfish species exhibit pronounced seasonalities. Their abundance peaks in the EEZ at different times of

the year (depending on the species in question) and their numbers and availability decline at other times of the year. They reside on the high seas for a part of the year and they enter the national waters of Pacific islands during other parts of the year. Because of this migratory behavior, curtailment of our effort would only benefit foreign fishermen operating beyond our EEZ. Management of pelagic species can only be done on an international level. The first item to be addressed by any international group must be the indiscriminant harvest of all species by drift gillnets.

Tuna should be included in the Magnuson Act because it would make fisheries enforcement easier and much more cost effective. Because tuna, the dominant fish in the region, are excluded from the Magnuson Act, U.S. fisheries enforcement in the EEZ is difficult. Foreign pole-and-line skipjack tuna vessels and purse seiners are free to conduct their fishing operations in the EEZ with absolutely no restrictions. Foreign longliners are, however, required to get permits to fish in U.S. waters because of high incidental catches of billfish. I have seen as many as seven foreign vessels actively fishing in a single area of the EEZ on some of my fishing trips and my colleagues see many foreign fishing vessels as well. Including tuna within the Magnuson Act will essentially eliminate foreign fishing within the EEZ.

My information on Hawaii's tuna fisheries has largely come from the market. We have a centralized fish auction in Honolulu that provides us with the pulse of what is going on. The data on the tuna fisheries provided by the fishermen themselves, however, are very scant and sketchy at best simply because there is no legal mandate for the Federal government to require comprehensive data collection on catch and fishing effort.

I recommend that Congress should include tuna within the Magnuson Act. That action is needed to legally authorize the Regional Councils to establish effective and meaningful data collection programs for all of our pelagic fisheries whether they are directed at tuna, billfish, mahimahi, wahoo, oceanic sharks and other migratory pelagic fish. In my opinion, our present policy regarding migratory pelagic species is odd. By a stroke of a pen, the law (Magnuson Act) as it is presently structured, has separated one-third of the pelagic ecosystem (billfish and associated species) for the other two-thirds (the tunas). It just does not work that way in nature. All pelagic fishes are inextricably intertwined. Ecologically, they are inseparable. And this fact of nature is brought out by the fisheries themselves. All fishing gears -- be they longlines, handlines, pole-and-line, drift gillnets -- catch a mixed bag of pelagic species but in varying proportions. Even our "cleanest" tuna fishery in Hawaii, the pole-and-line fishery for skipjack tuna, often takes mahimahi in fairly large amounts. Fishing gears simply sample

the pelagic ecosystem and the species composition of catches is a manifestation of the species mix in the ocean space where the hooks or nets are placed. Yes, it is possible to target on certain species of pelagic fish. But no, it is not possible to get pure catches of tuna or pure catches of other pelagic species. Congress should either remove billfish and associated non-tuna species from the Magnuson Act or include tuna within the constructs of the Magnuson Act. I believe that including tuna within the Magnuson Act is a better course to follow and I urge Congress to do just that.

I really don't know very much about the Fishermen's Protective Act and the Central, Western and South Pacific Fisheries Development Act and my comments on these laws should be taken with that admission in mind.

As I understand it, one section of the Fishermen's Protection Act (FPA) authorizes the U.S. Government to reimburse the actual costs and economic losses incurred by owners of U.S. fishing vessels that are seized by foreign governments for jurisdictional claims of those foreign governments which are not recognized by the United States. I do not know any fishermen in Hawaii who have the intention or the capability to fish in the EEZ of foreign countries. As such, the FPA is largely irrelevant to us.

I like the intent of the Central, Western and South Pacific Fisheries Development Act. This law was originally enacted in 1972, but it is my understanding that Congress has yet to appropriate even a dollar to implement the intent of this law. I am certainly in favor of programs which would "include, but not be limited to, exploration for and stock assessment of tuna and other fish; improvement of harvesting techniques; gear development; biological resource monitoring and an economic evaluation of the potential of tuna and other fisheries in such area" (1st paragraph of this law).

If Congress chooses to include tuna in the Magnuson Act and appropriates some funds to start implementing the Central, Western and South Pacific Fisheries Development Act, then I would also recommend that Congress expand the authority of the Western Pacific Fishery Management Council clearly allowing it to get involved in fisheries development functions. In my mind, fisheries management and fisheries development are as inseparable as tuna and billfish and associated migratory species. We need a truly holistic approach to fisheries management which includes development.

Once again, thank you very much for the opportunity to present my views.

Senator INOUYE. Thank you. You have indicated that there are 75 ships in the business now?

Mr. AMTSBERG. There are presently approximately 75 long-line vessels in the islands. There has been—we have just received 22 of them from the gulf, so there has been quite a shift into our area from other areas.

Senator INOUYE. How many men work on these ships?

Mr. AMTSBERG. Well, on my boat there is five and I think that is pretty typical. And the fishing power of the boats—we put, approximately, 2,000 hooks in the water a day, and the line covers an area of approximately 40 miles.

Senator INOUYE. There is no gill netting in the Hawaiian waters?

Mr. AMTSBERG. There is no gill netting in Hawaiian waters.

Senator INOUYE. Just long lines?

Mr. AMTSBERG. Just long lines.

Senator INOUYE. And all of your harvest is sold in the local market?

Mr. AMTSBERG. Not all of our harvest is sold in the local markets. The—anything that—any of the tuna that is high quality is either shipped outside—most of it is shipped outside of the Hawaiian islands, either to markets in the United States, or at times to Japan. But I do not know what the percentage is—but a substantial portion of our catch is consumed locally.

Senator INOUYE. Not being a fisherman, some of the words used are strange to me. What is the difference between a shark and a pelagic shark?

Mr. AMTSBERG. I do not know.

Senator INOUYE. What is a pelagic fish?

Mr. AMTSBERG. What do I think a pelagic fish is? One that migrates over an area that—if the fish is pelagic, then he migrates through our EEZ.

Senator INOUYE. What is your definition of pelagic?

Mr. WALSH. I would agree with him. It is—pelagic generally refers to open ocean and——

Senator INOUYE. Does that mean highly migratory?

Mr. WALSH. Well, highly migratory—let us go back to what highly migratory began as—highly migratory began as a concept to decide those fish that traveled greater distances than those that were resident in coastal areas.

There is a third kind of fish on which we based our policies and that is called—well, there is actually four, but we will not mention the other one.

There is an anadrymous, which are salmon and they have a country of origin. They are born there and they go out and they come back.

And so there was an effort during the late—during the law of the sea-policy days, and what happened is, the definition of highly migratory species was inserted in the law of the sea treaty.

And there was a list. And what happened is all the scientists got together from all the countries and they went to never-ending meetings and came up with this list. The list includes the tunas, and well, I assume they would be the same as pelagic.

What happened here in the United States, Mr. Chairman, is that during the negotiations—as you know, I worked for the committee

at the time—the issue came up about how to handle highly migratory species, assuming we were going to do what most of the country wanted to do very strongly because of the decline of our coastal stocks. And nearly every major coastal stock at that time was being overfished in the United States—was to differentiate out those that biologists said had to be managed on a wider basis because they were "highly migratory. '

What we did, very simply, is we made a political compromise. The inclusion of billfish was a political compromise; it, in fact, is listed as highly migratory and pelagic—the same terms.

Senator INOUYE. Thank you very much. May I call on Mr. Franks.

STATEMENT OF MICHAEL FRANKS, PRESIDENT, COASTAL SEAFOOD PROCESSORS, ACCOMPANIED BY BECKY PHILLIPS

Mr. FRANKS. Thank you, Senator. Thank you for the opportunity to speak today. I see it, as we are talking about the Pacific 90 percent of the day—we have a different set of problems in the Atlantic and the Gulf.

One problem we do not have—we are not collecting fish by any net method at this point. It is all long line and sport fishing.

The problem we have, if we include this species in the Magnuson Act—I think that we will see vessels being reflagged because, if we put a ban on the fish caught out of our same stocks, but brought back into the country, I think our boats will reflag.

Costa Rico, Mexico, and a lot of countries in the Carribean Basin will accept these fishermen if they reflag, or get some type of permits. The fact that we are punishing them by not letting them sell their catch in the United States does not necessarily mean anything, because I think they can export to Europe and Japan and other countries, possibly.

I think that using the Magnuson Act will just really alienate us from a world-governing body which we truly need on this migratory fish. I think the other migratory fish may be, should be discluded from the Magnuson Act also, so we can look at an international way of governing the harvest of this fish.

Again, we are from the east coast and we have a different set of problems. Our fish migrate through five councils' jurisdictions, instead of three, such as we have in the Pacific. It is very hard to get these five councils to agree upon anything, actually, because they are all looking out for their region, of course.

And so it would be very difficult to monitor it in that way, and I think that ICCAT is doing a relatively good job at this point.

Sure, there is room for improvement in everything, but I would hate to see a rash decision made or a quick decision made without further study to know what we are doing. We do not even know if we have two schools of fish or one school of fish on the east and gulf. And I think until some of these things are done, we do not know if we have two stocks of fish, actually.

I think until some of these things are done, we should leave things as they are and look at the other species.

And I see some of the concerns where—how could you disclude one fish that is migratory and not others?

Well, I kind of agree with that. I think that if we did that on the east coast, we will be facing a lot of recreational fishermen and it will become more of a political issue, which I really think it should be an international issue instead of a political issue at this point.

Really, we are not facing any purse seiners. I do not know if we are depleting the stock or not. I hope that we are not. I am a third-generation fish person and I certainly do not want to see my livelihood and possibly my children's livelihoods depleted.

But, at this point, I kind of oppose the jurisdiction of the Magnuson Act on tuna fish because some of the problems they are facing in the Pacific—and I think that is what we need to be addressing—is that we do have two sets of problems.

And I think that not using the Magnuson Act gives us leverage with other governments and other nations to say, let us sit down, gentlemen—ladies and gentlemen, and figure our situation out, and maybe disclude purse seining or drift netting in certain areas and try to come to terms rather than go into ourselves and try to do it alone.

Because in our economic zones, as we said, not a large percentage of our fish are caught, and I think if we limit that, in any way, it will just lie on the floor and fleet up at 201 miles and give them an opportunity to catch even more fish.

Quite honestly, because our fishermen cannot stand there—because they have a ban on their product.

And so they have to see their vessels—reflag their vessels, or get some permit to fish elsewhere.

And I think even though we will put a ban on it, these same stocks of fish—from Brazil, for instance, will go to Chile. It will be considered a different stock and sold back to the United States.

Where there is a will, there is a way. When there is a monetary gain, someone will try to beat the system.

Senator INOUYE. Are you satisfied that the resource management conservation in the Atlantic is operating well?

Mr. FRANKS. Certainly there is room for improvement. We need more data because, as I said, scientists disagree on—even if we have one or two stocks. Maybe Becky would like to elaborate on that.

Do you think we are being managed well?

Ms. PHILLIPS. My name is Becky Phillips and I represent about 65 long-liners who fish out of the south Atlantic area.

On the management, I have a little problem with the past performance of our regional council in the management of the billfish and the swordfish. Because, with the billfish plan, it resulted in a basic reservation of a specific fish for a specific-user group.

I am in the swordfish industry. I have a problem with the present plan. Again, this is the second plan that was going forward. The first one—part of the reason for it being rejected was because it deterred the American fisherman from a stock of fish that was openly fished by a foreign fishery.

The plan that is going forward now proposes a 70 percent cutback on the swordfish industry which will effectively shut down the swordfish-directed fishery within the U.S. waters—have major economic repercussions on our fishermen with the gains to the foreign fleets.

And in addressing foreign flagging of vessels—it is already happening in our area. There are countries, such as Grenada and Venezuela, and Tortola—those areas that are more than eager to have our technology and our vessels to fish—shut down the imports.

And we use wide-bodied jet service to bring our fish into the U.S. market. We will ship to Europe. It is an ever-growing market, and to deter our American fishermen from a stock that is going to be continuously fished by the foreign fishery, does not seem equitable.

And if you ask what the 70 percent cutback will do to the stock of fish, the answer is very little. But it will give us grounds to go to the ICCAT and say, this is what we have done. Now, what do you intend to do?

And to me, as far as management, with any pelagic, be it tuna, swordfish or marlin, or the billfishes, it should be done in the full range of their migratory areas, and not on a local level.

We have coastal pelagics. You were asking about pelagics.

On the east coast we have coastal pelagics—king fish run up and down our coast and encompass several states. In this area, the pelagic fishery and the swordfish and the tuna encompasses many countries.

And I came to Washington with blinders on. I thought, as a narrow-minded view, that our problems on the Atlantic Coast were the only problems, but listening to the problems that they are having in the Pacific—it is the problems that we had several years ago that they are beginning to address right now. And what is happening here will happen there. As far as management, I think it needs to be a multi-lateral type of management.

Senator INOUYE. Are your views supported by the other councils?

Ms. PHILLIPS. My views are not supported by anyone on the council.

Mr. FRANKS. We are not supported by the council because I feel that our councils are—they lean towards the recreational fishermen more. Because we in the east, and especially the gulf coast, we are not a big employer of people. We do not have a cannery that employs 1,000 people. And so we do not have the lobbyist. And just the hundreds of thousands of people with the time—and I feel for these recreational people, because they do think that we want to deplete every commercial fish in the Gulf or the oceans. And that is certainly not true.

We, I feel, are conservationists also, but we are kind of overshadowed by the recreational needs in our areas.

Ms. PHILLIPS. May I make one more statement?

Senator INOUYE. Certainly.

Ms. PHILLIPS. I think the best barometer of any fishery, I do not care what fishery it is, the best barometer is a fisherman. And a pelagic fishery—if you take swordfish, which I am familiar with—when our fellows go to sea and they commit their lines to the water, they commit their night's fishing to cost them between $2,000 and $2,500. Keeping that in the back of your mind, they are also making $5,000-a-month boat payments, equal payments for insurance.

And to see a collapse of a fishery, that they have virtually nowhere to go except into this pelagic fishery, to see a collapse of that fishery is not what is in the back of their mind. No one in this in-

dustry is fighting conservation of the resource. We want management done in a responsible manner, in the full range of the territory that those fish travel.

It is not that we do not want conservation—we want conservation, but we want it done with all user countries involved.

Senator INOUYE. Thank you very much.

May I now call upon Ms. Gertrude Nishihara.

STATEMENT OF TRUDY I. NISHIHARA, HAWAII FISHING COALITION

Ms. NISHIHARA. Thank you, Mr. Chairman. Thank you also for allowing me to provide comments on inclusion of tuna under the Magnuson Fisheries Conservation and Management Act.

My name is Trudy Nishihara. And I am the recreational fisherman supposedly that is putting an impact on the commercials. I have provided my written testimony, and I hope it will be accepted for the record.

I would like to deviate from that and express some other concerns in regards to the Magnuson Act and tuna inclusion. My interpretation, and I have been on the Western Pacific Fishery Management Council for the past 9 years. I have been involved in many discussions with the foreign countries that do fish in our waters in the formulation of our billfish plan. And, in so doing, I did learn that there is very much meaningful grounds for the foreign fishermen within our waters in the Pacific.

And, as stated, the Pacific Ocean is a very large fishing ground for many, many fishermen. Realizing this, and having to go through some of the hardships, we are formulating a billfish plan. Because of tuna not being part of the migratory unit species, it was very difficult in trying to, as my understanding of that, to conserve and manage the fisheries for the benefit of the U.S. domestics. And somehow we did get a management plan approved.

Now, although there has been concern that management plans are oriented to benefit special user groups, I would have to doubt that, because I really look at my position seriously. And when the Fisheries Conservation and Management Act was created, I believe it was created for the conservation and management of the resource of the United States.

Now, conservation may be interpreted in many different ways. And some may have interpreted it as being conservation for the resource or conservation for the fishermen, or conservation just for the sake of conservation.

Now, I believe that the act itself was to create the conservation for that resource. Whenever a fishery management plan is approved, the law has stipulated seven national standards where it must pass all of these seven national standards before it can become that plan.

One of which, and I think the foremost, is national standard number one, conservation and management measures shall prevent overfishing while achieving on a continuing basis the optimum yield from each fishery for the U.S. fishing industry.

Knowing this, and knowing that whenever a fishery management plan has to go through rigid approvals before it can become

law, I do believe that all the intents are to benefit all the fishing industry.

Now, looking at that, I would say that it is not, when it comes to this tuna inclusion, a user allocation problem. It is not a recreational versus the commercial industry. It is the fish that we are talking about—the Management Act—the intent of the act when it was first created, was that intent to benefit the fish or benefit the users, or benefit the fishermen? I would have to tend to agree that it was created to protect that resource.

The conservation I look at is that we have a continuing supply of that fish for all the U.S. fishing industry. And looking at that, I would have to say that perhaps the intent of Congress when they had created this law may have been misled along the way as the years went by. Because now I feel that the intent is maybe not to conserve the fisheries, but maybe another tool to use as an access for the fishing industry to be preserved.

Now, if the Magnuson Act is intended, right now, to be used as a tool for access, then perhaps to preserve that fishing or that U.S. fishing industry for the benefit of its people, then perhaps we should be looking at other avenues to support this industry so that it can thrive and that it can develop economically for its own, and to benefit this Nation.

But to use it as a tool for access, under the guise of conservation, but then, conservation for whom becomes the question. I do believe that tuna is part of a pelagic fishery. And, as any fisherman can tell you, that it is very difficult to separate the different species within a pelagic or any management unit species. Because we can send hooks down, and even if I am a recreational fisherman, I can send a hook down there, but I will not guarantee you that when I send out that hook I am only going to catch a billfish, or I am only going to catch a yellowfin.

Now, even a long-liner throws that hook down, but he does not know what he is going to catch. And he cannot tell the billfish: do not buy my hook because you are a billfish.

Now, because this exists and because the fish swim in the same ecosystem, it becomes difficult for any management plan to be very effective, although the councils I know have put in much of their effort to make the system work, to fulfill the requirements of the act. But I think, as we go along in the years, people are misled, misguided, there are politics involved with it. And it is only natural, because we all come from different user groups; we all come from different interests and we all have different economic needs.

And because of it, I would have to suggest that probably if the issue is one of conservation, then let the tuna be included for the reason that the Fisheries Management Act was created: the conservation and the management of the species for the people.

But if the intent of Congress was created to use it as a tool for access, then perhaps we should be looking at amendments to so justify that reason. But if a tool is required for that industry to survive, then perhaps Congress should be looking at all the other acts, whether the Fishermen's Protective Act is benefiting them; does it have to be tied in with the Magnuson Act to make it work; is there another tool we can use to give the State Department the leverage they need to negotiate properly for our fisherman.

But to use the Management Act, and to say that tuna is a highly-migratory species, and because it is so highly-migratory, and because, even if it goes around with the same bunch of people, and to exclude it, I think it would be very unfair. And it would create more problems than we are encountering.

Now, many of us feel, and I think all of us here feel, whether we are commercial, whether we are recreational, that international management is necessary because it is a migratory fish. True, international management is needed, but before any international management can work, or before any country can come down and sit down to the table and discuss, I think the management has to begin at home. There has got to be some guidelines set.

And through our 200-mile management act, we can formulate the guidelines, formulate the direction, so that, in cooperation with the other countries, they may also have the same guidelines; they may have the same objectives, and understanding where we are coming from. And understanding where they are coming from, it might be easier to formulate an international management scheme, which would be the ultimate objective of any kind of a migratory management.

In so doing, I would like to say that the recreational fishermen do support the reauthorization of the Atlantic Convention Act.

I would like to also add that there is a very viable industry, going as far as the recreational fishermen. Recreational fishermen is not only going out there and tag and release and have a good time. And some people might think that we just invest money to have a good time. But there is also, because of how our society is and how the dollar value has gone so high, that a lot of the recreational fishermen go out there not only for the pleasure, but also to have that food on the table.

Because in this health-conscious society, people are changing into eating fish—more fish, whether it is processed or raw. And, in so doing, we go out there to have fun, to catch fish, to put food on our table, and also, instead of wasting the surplus, we sell it so that other people may benefit from it.

So now, the trend has developed whereby we have quasi-recreational fishermen. Fishermen not only in Hawaii who have done it for years, but also fishermen on the east coast realizing the value of the bluefin tuna, is doing the same thing now. You do not go out there and catch bluefin and have a good time, tag and release it, or come home and take a good picture of it and then sell the fish to the Japanese. No. They go out there and catch the fish, have a good time, come home, and they try to recoup some of their expenses so they can enjoy the sport again.

So, when you really look at the Nation itself, the thought of recreational fishermen, the purest recreational fisherman is not really the recreational fisherman that you may see in the marine waters. I feel the purest recreational fisherman is that freshwater fisherman, the trout fisherman who really goes out there for fun.

Thank you.

[The statement follows:]

TESTIMONY OF
TRUDY NISHIHARA
BEFORE
THE SENATE COMMITTEE ON
COMMERCE, SCIENCE AND TRANSPORTATION
AND THE NATIONAL OCEAN POLICY STUDY

JULY 20, 1989

Mr. Chairman and subcommittee members, I want to express my sincere gratitude for giving me an opportunity to appear before this Committee to provide my views on the inclusion of tuna under the Magnuson Fisheries Conservation and Management Act (MFCMA). My name is Trudy Nishihara. I have been ocean fishing as a hobby and sport for as long as I can remember. Tuna has always been prominent in my fishing experiences. I have been a member of the Western Pacific Regional Fishery Management Council since 1980. I am currently Vice Chairman of the Council representing Hawaii and share in chairing the Council's Standing Committee on Pelagic Species. This committee has overseen the development of the Council's Fishery Management Plan of billfish and associated species. I am also a Director of the Hawaii Fishing Coalition with statewide membership representing the recreational and sportsfishing community and other sportsfishing clubs and associations. My testimony today is on behalf of Hawaii's sportsfishing community, my fiduciary role of the recreational sector of the Western Pacific Regional Fishery Management Council

and most importantly America's recreational fishermen and women.

In 1976, when Congress enacted the Magnuson Fishery Conservation and Management Act (MFCMA), the issue to include or exclude tuna within the provisions of the act was strongly debated. Ultimately, a compromise was reached to exclude tuna from the Act. However, the Congressional Committee Report on this Act directed that the United States seek to develop regional treaties for the conservation and management of regional tunas which has not been accomplished. At that time most recreational oriented fishermen and fisherwomen felt strongly that their interests had not received proper recognition. Mr. Chairman and subcommittee members, it is now time to rectify that matter and protect the legitimate and proper interests of ocean anglers.

We urge Congress to extend U.S. claim of sovereign rights of its coastal waters as have every other nation, by including the management of tuna with other pelagic resources to fulfill the conservation objectives of the MFCMA. It is essential we manage the fisheries within our own EEZ first especially in a migratory fishery before any international management can be successful. The collection of data and monitoring of the catch and effort of a pelagic fishery throughout its range is vital in understanding the fishery of a highly migratory nature. It is our responsibility to accomplish these basics which are necessary before any management, domestic and international can achieve its

conservation goals. The effectiveness of the International Commission for the Conservation of Atlantic Tunas (ICCAT) can only be enhanced and strengthened through efforts obtained by domestic management. We support the reauthorization of the Atlantic Tuna Convention Act of 1975. International management and other cooperative international management is necessary if we are to manage a migratory resource.

Presently, because of the archaic U.S. tuna policy, the fishery management plans (FMPs) for pelagics fishery have been curtailed and if not severely limited in its ability to implement conservation measures since tuna, which shares the same ecosystem as the marlin and sharks will be impacted, especially in the longline fishery. The U.S. tuna exemption under Section 102 of the MFCMA has put restraints on the Councils since 1977 when initial steps were taken to develop an FMP for billfish and swordfish. As long as tuna exist within the same ecosystem as the other migratory species, achieving conservation and management objectives as described in the MFCMA will be difficult, if not impossible.

Substantial longline by-catch of billfish in the Gulf of Mexico and the Atlantic coast instigated the development of a billfish FMP. Unfortunately because of the State Department's perception of the present tuna policy to provide a reasonable opportunity for fishing vessels to pursue tuna in the EEZ, a non

retention program was initiated by the National Marine Fisheries Service (NMFS). This program has reduced the number of foreign longline vessels operating in the U.S. waters but has not contributed to the conservation objectives of this pelagic fishery. In 1988, an Atlantic Billfish FMP was approved limiting recreational catch of billfish and outlawing catch and sale of commercially caught billfish and swordfish. This non-retention FMP does not serve to reduce billfish/longline interaction nor does it reduce the thousands of billfish being wasted in the longline fishery since most billfish hooked are dead when released. Also in 1988, the Western Pacific Regional Fishery Management Council implemented a framework Billfish Management Plan. A preventative management plan to limit the billfish catches and foreign longline activities in hopes of accomplishing the goals of conservation within the U.S. EEZ.

Because I fish mostly for recreational motives, my testimony before this Committee may appear to have an inherent recreational fishing bias. However, there really are very few purely recreational fishermen or purely commercial fishermen or purely subsistence fishermen. All fishermen share one major commonality and that is the fish we catch. In actuality, I am a quasi recreational/commercial/subsistence fisherwoman. I usually go fishing mostly for fun and eat most of the fish that I catch, and

sell the rest to help cover the cost of my fishing trips. I think that I'm quite typical of the recreational sector of the "U. S. Fishing Industry", an accepted and valid generic term incorporating both the recreational and commercial fishing communities sharing elements of mutual concern.

Three species of tuna (bluefin, yellowfin and bigeye tuna) are par excellence gamefish in the same league as marlin and swordfish. Skipjack, albacore and blackfin tuna grow to a smaller size and as a result, they don't have as much lustre with big gamefish fishermen. However, the smaller tunas are more abundant than the larger ones and they provide great recreational fishing experiences for countless Americans. All species of tuna are extremely important to both recreational and commercial fishermen fishing off the Atlantic and Pacific Coasts and in American Pacific Islands. As an example, there were approximately 100,000 offshore recreational fishing trips with countless numbers of individuals, targeted at catching billfish, tuna, mahimahi and ono in Hawaii in 1976. Recreational fish landings have satisfied household demands of protein while surpluses have been either given away to friends, family and neighbors or sold to markets to generate additional income to support this most popular past time. Research findings have indicated that recreational fin fish landings were equivalent in terms of poundage to domestic commercial landings of fin fish in 1970. 1986 statistics describes Hawaii's recreational resident

boaters sell approximately 10 million pounds of fish annually at a value exceeding 22 million dollars compared to full time commercial landings of 9.6 million pounds worth 14.8 million. (Meyer 1987) Yet, none of these species other than the Atlantic bluefin tuna are being managed with the welfare of American recreational fishermen in mind.

Many fishermen believe our yellowfin tuna are not as highly migratory as was once believed to be. Many of our long time fishermen believe we have large schools of resident tunas that travel within our EEZ. The length of time they remain in or out of our EEZ is largely dependent on their food source, which includes smaller tunas. We in Hawaii are presently experiencing a very unusual yellowfin tuna season, which we hope is not the result of concentrated effort of the longline fleet in our waters. For as many years as we can remember the yellowfin normally returns in very large schools to the Hawaiian waters at the ending of May, however, this year it is now the end of July and very few have been caught by our trolling fleets. We hope this is not a direct result of the efforts of the longliners, but hopefully just a late cycle of the habits of this animal. It is also very apparent from results of many fishing tournaments throughout the State, that catches of tuna have continued to diminish through the years. It used to be very common among the trollers to catch as many as 4 or 5 a day. Today, we can rarely catch a single fish a day. In 1989, seventeen Gulf longline

vessels moved their operation to Hawaii and more are expected from the West Coast. While their move may have provided increased individual catches of high value tuna, it also increased commercial effort on highly rated tuna and billfish species greatly sought by both commercial and recreational anglers. This state of affairs must be rectified by including tuna within the coverage of the Magnuson Act. Preventative management imposed may avoid conflicts due to scarcity and competition sought for by high dollar value.

Also, it is my strong belief that maintaining the present policy of tuna exclusion makes no sense---either politically, legally or ecologically. The tuna exclusion policy is politically unwise because it is not democratic. The policy is aimed at only protecting the economic interests of the distant water U.S. tuna fleet, but it does not provide any voice for thousands upon thousands of coastal U.S. tuna fishermen regarding management and allocation of some of the most important fishery resources within U.S. waters. The tuna exclusion policy is legally unwise because it has unnecessarily isolated the United States in the world community of fishing nations. For reasons which are beyond me, the U.S. has refused to join in a worldwide movement to include tuna within the jurisdiction of coastal states. The tuna exclusion policy is ecologically unwise because it does not mirror ecological realities. In 1976, Congress saw fit to include species of marlin, sailfish, swordfish, oceanic

sharks, mahimahi, wahoo and salmon within the management constructs of the Magnuson Act. The tuna exclusion is making us look like scientific schizophrenics. We can cure ourselves by treating tuna like any other fish---whether they be migratory, highly migratory or mostly homebodies. There is no compelling need for continuing to make artificial legal distinctions between classes of migratory fish. We need to manage the whole pelagic ecosystem, and including tuna within our jurisdiction will help us do just that.

I believe that inclusion of tuna is necessary from both the standpoint of the fish and fishermen. The only way that the economic and psychic interest of fishermen can be protected in the long run is to have the tuna resources protected and managed with the long run in mind. Before any fishery resource can be effectively manage, a basic understanding of the resource itself must first be had. It is fortunate, but true, that we lack a basic understanding of the tuna resources in the Exclusive Economic Zone of the U. S. because we lack a legal mandate to gather comprehensive catch and effort data on the tuna fisheries off our shores. The Magnuson Act needs to be amended giving the Regional Councils the legal authority to monitor the tuna fisheries so as to build a basis for their subsequent management for the benefit of all tuna fishermen.

Much has been said and written about international

management of tuna versus exclusive management control. It is often implied that it is a one or the other situation, and not both. We need both elements in order to wisely manage highly migratory species. We need to have good "local" data bases on tuna before we can have any pretensions of data sharing with other nations. And the only way of securing good data on our coastal tuna fisheries is by including tuna under the coverage of the Magnuson Act. Failure to act wisely in this regard will guarantee the continuation of our state of ignorance but certainly not bliss.

The tuna stocks within the U.S. coastal waters are vulnerable to overfishing regardless of their status as "highly migratory" species. Our coastal tuna resources will become depleted if we continue to lack the will to include tuna under the Magnuson Act. The economic consequences of depleting our coastal tuna resources would be staggering. It has been estimated that over 30 million people are engaged in recreational and commercial fishing in the coastal waters of the United States. At the present time, there are more than 8,000 commercial U.S. vessels engaged in supplying a growing domestic market for fresh tuna and an expanding export market for sashimi-grade tuna. In addition to rapidly growing commercial tuna fishing activity along the U.S. coastline, recreational and subsistence fishermen are also catching tuna in increasing numbers. There were an estimated 72 million recreational fishing

trips taken by marine recreational fishermen in the U.S. and they caught over 466 million fish in 1986, (U.S. Department of Agriculture, 1987: Tables 713, 715). In some regions of the country, tuna constitute between 30 and 17 percent of recreational catches. If we valued these tuna catches at commercial prices, these fish would be worth nearly $18 million. Commercial fish prices, however are not valid measures of recreational experience. The recreational/charter fishing industry on the East Coast alone has over $60 million invested in vessels which catch tuna. A study done in Hawaii estimated that recreational boat fishing (including charter boats) in Hawaii was worth about $223 million, including expenditures for fishing gear, bait, ice, food and transportation. (Meyer 1987) Nation-wide, only the direct recreational expenditures related to catching tuna could exceed $260 million dollars annually not counting capital expenditures in vessels, electronic equipment and other capital cost items (Hudgins, 1988) and not factoring in any economic multipliers to measure the total economic activity generated by the sport. Today, there is a viable recreational fishing industry growing to supply the fresh fish market. Nationally, this quasi recreational group is creating new businesses and supplementing incomes towards economic benefits to the nation.

This month's issue of Salt Water Sportsman contains an editorial (attached) dealing with the economic impact generated

by fresh and salt water sport fishing. According to the editorial, the overall economic output of the sport fishing industry was a staggering $70.6 billion in 1985, making the sport fishing industry one of the major players in our economy. I don't know just what portion of this phenomenal economic output can be attributed solely to recreational fishing for tuna, but even a small percentage of $70.6 billion would be nothing to sneeze at.

The recreational fisheries for tuna and other migratory pelagic fishes are tremendously valuable. Auxiliary businesses such as bait shops, marinas, hotels, charter and party boats, restaurants and bars and a host of other leisure industries are dependent, to various degrees, on healthy tuna resources. Should tuna resources, become threatened because of a lack of management, these industries will be economically threatened too.

The recreational and commercial coastal tuna fisheries have much in common. Both sectors sell premium grade tuna to satisfy America's growing appetite for quality fresh fish products and Japan's seemingly insatiable demands for sashimi. Many recreational fishermen, like myself, are not entirely without some commercial motives. We immensely enjoy pursuing the art of fishing. Our enjoyment of the sport is even greater when fish sales can help us recover some of our expenditures.

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On behalf of the recreational fishing community, I am asking Congress to include tuna within the Magnuson Act. The present policy of tuna exclusion has outlived its usefulness. The policy is archaic, old and stodgy. It no longer has much relevancy to it. Our coastal tuna fisheries have changed phenomenally since Congress enacted the Magnuson Act 13 years ago. Our legal position should be changed to include tuna within the Magnuson Act. Doing that would put us in step with the rest of the world and result in good management of tuna resources at home and in a larger regional or international context.

Thank you very much for giving me an opportunity to express my thoughts and views on the very important issue of tuna inclusion within the Magnuson Act.

References

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Meyer Resources, Inc. 1987, "A Report on Resident Fishing in the Hawaiian Islands", Adm. Report H-87-8C, Southwest Fisheries Center, NMFS Honolulu Laboratory, p. 74.

Hudgins, L.L., 1988, "Structural Change and the Case of Tuna Inclusion Under the Magnuson Act: Prosperity and Value in the U.S. Coastal Tuna Fisheries, Western Pacific Fishery Management Council, p. 58.

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Senator INOUYE. Thank you very much.

I gather that the Western Pacific Council has a billfish management plan. How does that compare with the Atlantic Billfish Management Plan?

Mr. NISHIHARA. Our Billfish Management Plan right now is a frame-up plan, because we do have foreign fishing within our island. Foreign fishing in the eyes of the Magnuson Act is tuna fishing if it is susceptible to any bycatches. We have pole and line foreign fishing going on around the main Hawaiian Island. And I do know for a fact that the Japanese do have interest within the 50 miles of the Hawaiian Islands. And one of our billfish negotiations is discussions about creating this plan.

The Council wanted 100-mile closure. In talking with the Japanese, they insisted they needed 50 miles. After some lengthy discussion, they had told us the reason why they wanted the 50 miles was because they had some good fishing grounds within that 50 miles; that it was important for them to have that 50 miles.

Now, all of this pole and line fishing is foreign fishing. They are tuna. They may not be yellowfin, but they are still tuna. But these cannot be counted because no data is collected. And the reason why we cannot collect those data is because they are exempted, because they are directed fisheries for tuna. The only control that we have on tuna is on the long lines, whereby their bycatches of billfish and swordfish, and because they catch billfish and swordfish, which is regulated under the Magnuson Act, that is the only reason why we can get some information on these boats, because they need to carry observers.

Other than that, there is really nothing.

Senator INOUYE. I thank you very much.

And our final witness this afternoon is Mr. Fithian, chairman of the Hawaiian International Billfish Association. And I have known Peter for a long time, and we very deliberately selected Mr. Fithian to be the wrap-up witness. You have had the advantage of receiving all the testimony. And now it is your turn to do whatever you want with that.

STATEMENT OF PETER S. FITHIAN, CHAIRMAN, HAWAIIAN INTERNATIONAL BILLFISH ASSOCIATION

Mr. FITHIAN. Well, thank you, Mr. Chairman. It is always a pleasure to be in a hearing that you are conducting, so that everybody gets a chance to fully say what they need to. The disadvantage to testifying last is that perhaps everybody has said—what can be said.

But I have heard some interesting things today, and I would like to just comment on a couple of them. Incidentally, I have submitted a written statement.

Governor Coleman, who was very carefully trying to tell us that the Pacific way would suggest that our tuna treaty may appear to be a happy circumstance, but what he is really saying is that we have got to go beyond that to win the respect of these Pacific island people. I would have to submit, Mr. Chairman, that the difference between having people come in and just take your fish and go away, as opposed to receiving $50 or $60 million over a period of

time, or some percentage of that, that the alternative would be easy to select.

Nonetheless, we—the USA—did do something. And, in so doing, it appears, from all the conversation today, that we recognize that these Pacific nations have a right to manage the tuna in their area. Admiral Hays, who obviously reconfirmed that indeed there is that sentiment in the South Pacific as to the nature of the—I have heard various words attached to the high seas tuna clippers—but the nicest ones are that they sort of come in and take some of the resource, and there is still the sentiment of resentment there.

Ambassador Wolfe so completely believes that the only way to do it [manage tuna] is the way it is now, that it is hard for me to comment on it. It seems to me that I read somewhere in the testimony of one of the gentleman from the tuna industry, that they [tuna industry] have been involved in discussing these matters here for some 50 years. And I respect them greatly and give them great credit for having done an awful lot of work, and in training and influencing and creating a whole belief, so that our entire government is in a position, it seems to me, of going in the direction of supporting that [tuna] industry; which is an important industry.

And I have no belief that anybody in recreational fishing wishes to see it go away. After all, we are mostly businessmen ourselves and we are very reluctant to add any government control to a business. That just makes business harder to do.

But I suspect that if the tuna people—and I thought up to this point they used the term "Councils are dominated by recreational fishermen," but I did not realize until today Mr. Felando says that they have not really participated [in the councils]. I suspect that if the commercial fishermen would make the effort to join the councils, become part of the councils—after all, it is not possible for a council just tomorrow morning to tell you to stop catching tuna. That is very unlikely. You heard Mr. Paty say it will be 10 years before you get enough information to make a ruling.

If the management or the imposition or, I should say, the final passage of the Pacific Billfish Management Plan is any example, it would take 20 years to create a Pacific tuna management plan. And I found out listening to Mr. Walsh today that after a lot of people who spent a lot of time for a long time, that they [NMFS] rejected it [the Billfish FMP for the Pacific] on some grounds that seemed to me really specious in the thinking, and again, the rejection seemed only to deal with things that were not really what we had studied.

But, eventually, the plan was passed. And I submit that if the—the commercial people now are not under the Magnuson Act, and I do not blame them, in one way, for not wanting to get under it, because then the act requires, [and it is the only fishing law this government has ever had that requires] even-handed treatment of recreational and commercial fishermen but the way they have it now, they more or less can make the arrangements and go on their own way. On a council—they would have to get on a council and have to be involved. And if they have not yet been trying to get on councils and have some influence, then they certainly would be able to do that.

The feeling that the councils—I thought Ms. Nishihara said it very well—to eliminate tuna fishing is not the implication, in the Pacific particularly, sir—we are very sympathetic to the catching of tuna. There has to be tuna caught. But we cannot manage the billfish because every time we try and manage the billfish, which are an important resource for recreational fishermen, one of the many departments of government comes up and says yea, verily, this is tuna; you cannot touch them.

And if I am not mistaken, the reason that there have not recently been many tuna caught by foreign long-liners in the Pacific is that the Billfish management plan requires an observer to be taken on board when they [foreign fishing vessels] come into the [EEZ] zone. They do not want to take an observer on, so they do not come into the zone and do not fish for tuna. So that is a little bit fallacious that we say that 90 percent of the tuna fishing dropped off because of something—some adjustments in the rules. Well, that is the actual adjustment of the rule. They do not wish to do that. Incidentally, when they do, we would get some data.

Probably if the tuna industry would share data with the councils, they [the councils] might be less concerned. But they [tuna people] see it as only proprietary information, and it is difficult to know how much tuna has been taken. Everything in the Magnuson Act, a very brilliant act in my opinion, requires an enormous amount of information be gotten together before any action may be taken. We do not have any industry information on the tuna. And the Japanese have not given us any information on billfish since 1980.

And our symposium in Kona last summer [Billfish II] I was struck by the fact that Mr. Joseph [James Joseph of IATC] said that tuna and billfish really ought to be talked about in the same breath. Another comment I have is that I am not so sure that the compromise was to put billfish into the MCMA, as I am to think that they left tuna out when the Magnuson Act was passed.

And things have changed so radically since then that it really is time for that—for tuna, with all the necessary concerns—that the Congress should now inevitably place tuna under the act. I really believe that on the evidence of everything that has been said here today, and some enormous number of learned papers have been put forth, I still think you have to come down on the side of including tuna under the act, giving the tuna people a chance to be on the councils and manage the fish the way this Congress decided that fish should be managed, and include tuna in that management scheme.

I think that is the only thing that makes any sense, Mr. Chairman.

[The statement follows:]

TESTIMONY (and SUMMARY) OF
PETER S. FITHIAN
BEFORE THE SENATE COMMITTEE
ON COMMERCE SCIENCE AND TRANSPORTATION

JULY 20, 1989

Aloha, I am greatly honored to be here to testify in favor of the inclusion of tuna under the Magnuson Fishery Conservation and Management Act (MFCMA).

My views on this issue have been developed over a lifetime as a recreational fisherman, charter member of the Western Pacific Regional Fishery Management Council and Founder-Chairman of the Pacific's oldest and perhaps best-known fishing contest--the Hawaiian International Billfish Tournament in Kona, Hawaii. I also serve as Chairman of the Pacific Gamefish Research Foundation, a scientific organization dedicated to understanding the biology and ecology of pelagic gamefish throughout the world. I am a member of the governing boards of three other non-profit organizations concerned with the conservation and supervision of gamefishing worldwide: the International Gamefish Association, the National Coalition for Marine Conservation and the Billfish Foundation.

I offer these credentials only to demonstrate that there are some of us in the field of recreational fishing who have a very keen interest in this tuna amendment. We are a different industry, perhaps not as established as the commercial tuna industry, but representing a much larger collective voice. Our views regarding the importance of tuna to recreational fishing deserve as much consideration as those of other user groups.

Large tuna and billfish are the most highly-prized species for big game anglers. These trophies are the focus of most fishing contests the world over. As a consequence, there is competition between commercial and recreational pursuits. The MFCMA requires equal treatment for commercial and recreational interests. There is no reason to fear the more objective and balanced management of large gamefish that would result from tuna inclusion in fishery policy-making.

My associates in gamefishing throughout the islands of the Pacific cannot understand why we do not manage tuna in our own EEZ. As it now stands, with certain restrictions, a longliner could sit in front of the Kona harbor next week and longline for tuna. All the while he will be catching billfish incidentally; eventually this would lead to the demise of our recreational fleet, which is no laughing matter. For example, the financial impact of our one-week tournament is $7 million dollars. The other 51 weeks certainly equal that amount, but remember that this is just Kona, Hawaii, and represents only a minute sliver of the total value of recreational fishing for large tuna and billfish in the U.S.A.

In my view, it is simply not possible for the regional councils to manage billfish without managing tuna. Fishery statistics are required for prudent management, but according to the second International Billfish Symposium, the U.S.A. has no billfish catch data since 1980, and even those early statistics were from the Japanese simply because the Magnuson Act does not provide for any.

As a council member, I watched time and time again as the State Department gave their reasons why they did not want the councils to manage billfish, mostly because it might impact on relations with Japan and others. Naturally, the State Department resented anyone getting involved in what they see as their domain. Now they are involved in delicate negotiations with Asian countries to stop drift gillnet fishing. My Board Members and I wonder how the U.S. can pursue management of the high seas when we do not even watch our own EEZ, especially when every other country on Earth, except the Bahamas, does.

Much is made of the treaty with the South Pacific island nations permitting the taking of tuna for a fee. Why isn't there more connection between the South Pacific Tuna Treaty approach and tuna management in our own EEZ? By acknowledging the sovereignty of other nations over their tuna resources, have we not abdicated any right to deny we believe in it ourselves?

The argument is often made, and was reconfirmed at the second International Billfish Symposium held last summer (which I had the honor to Chair), that tuna should be managed internationally because they are highly migratory. It has become pretty clear, however, in recent years that (1) only some tuna are highly migratory, whatever that phrase means, and (2) what has being migratory got to do with managing tuna in our own EEZ. New Zealand recently banned some tuna fishing in their EEZ with beneficial results. Their opinion is that to manage tuna successfully you have to start somewhere, and why not begin at home?

There will be very convincing testimony about the many absolutely compelling reasons to include tuna under the MFCMA. As one of the people of this country who is deeply involved in recreational fishing, I say that every one of these reasons is valid and that the number of reasons is overwhelming. Times have changed greatly since the inception of the MFCMA.

Excluding tuna never made sense to me in the first place, but that appears to have helped the Act to get be passed. Since then, however, we have been playing a charade, a charade which can no longer be tolerated in the face of such convincing reasons to manage tuna.

I earnestly ask this august body to take the action necessary to correct this situation, and include tuna under U.S. fishery jurisdiction.

Thank you very much.

Senator INOUYE. I thank you very much, Mr. Fithian. I would like to continue the discussion, but I have just been notified, as you can see those five lights there, there is a vote going on at the present time, and I must report to the Senate floor. And so, may I take this opportunity to thank all of you for sharing your knowledge with us, and your wisdom.

I can assure you that the committee will study your testimony very carefully. Although most of them are not here, I can assure you that most members do read testimony. And before we make up our minds, if we do at all, you may be assured that your words will be read very carefully.

And so I thank you all once again.

The meeting is adjourned.

[Whereupon, at 5:30 p.m., the hearing was adjourned.]

ADDITIONAL ARTICLES, LETTERS, AND STATEMENTS

STATEMENT OF HON. WILLIAM V. ROTH, U.S. SENATOR FROM DELAWARE

Mr. Chairman, distinguished members of the committee, I want to thank you for the opportunity to present my views on the need to include tuna under the management authority of the Magnuson Fishery Conservation and Management Act. I have been involved with tuna regulation for many years, and I am pleased that the committee is holding a hearing on this important issue. I look forward to the testimony before us today.

The Magnuson Act has been highly successful in stimulating our domestic fisheries since its passage in 1975. Times have changed, however, and the time has now come to reexamine the assumptions that lay behind the initial wording of the act. Tuna was excluded due to its being a "highly migratory species," best subject to regulation by international agreement. Since it was felt that there was little commercially significant tuna in U.S. waters, this provision had the dual effect of benefiting our distant water tuna fleet in their operations, while not adversely effecting domestic water fishermen.

In recent years, however, this argument has lost much of its force. The exclusion of tuna from domestic management is not internationally accepted; all other nations with major tuna resources in their coastal zones regulate them. Moreover, the American domestic tuna fishery has become an increasingly large economic force. For example, according to a report by the Mid-Atlantic Fishery Management Council, there is an increasing commercial market for American Atlantic tuna; over 22 million dollars—wholesale—of tuna was shipped to Tokyo alone. In addition, the recreational fishery associated with tuna has a total value of over a quarter-billion dollars. These figures argue for the existence of a significant American tuna fishery, a real change from the situation that existed at the passage of the Magnuson Act.

The continued exclusion of tuna from management is a source of concern for all Americans. Due our inability to regulate tuna, stocks of other types of fish taken along with tuna are being depleted, notably sharks, sailfish, and billfish. This threatens the continued viability of Atlantic fisheries. In a recent statement, five of the seven domestic fishery management councils called for the inclusion of tuna in the present management structure. Citing the problems of potential overfishing of both tuna and other fish that are taken as incidental catch by tuna fishermen, the councils called for an end to the exemption of highly migratory species under the Magnuson Act, which would have the effect of allowing the regulation of tuna.

To this end, I will be introducing legislation in the near future that will eliminate the present exemption of tuna from regulation, and I urge the members of the committee to support me. I look forward to the comments of the witnesses at this hearing, and I hope their testimony will bear out the need for this modification to our present policy.

Again, I want to thank the chairman and members of the committee for the opportunity to testify, and I encourage input on this issue from all concerned.

STATEMENT OF MICHAEL SACCO, PRESIDENT, SEAFARERS INTERNATIONAL UNION OF NORTH AMERICA, AFL–CIO

Mr. Chairman: My name is Michael Sacco. I am president of the Seafarers International Union of North America, AFL–CIO. Today, I am speaking on behalf of one of our affiliates, the Fishermen's Union of America, Pacific and Caribbean Area. I appreciate this opportunity to comment on the reauthorization of the Magnuson Fishery Conservation and Management Act.

For over a dozen years, the Magnuson Act has served to protect and promote all fisheries of the United States. Section 103 of the Act codifies a tuna policy backed by the Federal Government and the commercial tuna fishing industry since the 1940's, a policy that has worked very well.

Consequently, the Fisherman's Union supports reauthorization of the Magnuson Act, but strongly opposes any change in its provisions relating to tuna. There has

been no change in the commercial tuna fisheries of the U.S. to warrant such a change, nor to our knowledge is it sought by the industry. On the contrary, a change of existing tuna management policy would cause substantial harm, rather than benefit, the California tuna industry.

The present tuna policy of the Magnuson Act has made it possible for our government to negotiate a highly regarded treaty establishing tuna fishing access arrangements in the western Pacific with 16 Pacific island countries. We believe the maintenance of such tuna policy provisions in the Act is critical to the future of the U.S. tuna industry in the negotiations of tuna treaties with countries off Latin America.

More importantly, the existing tuna policy of the United States as reflected in the Magnuson Act has been working successfully in making tuna conservation a reality in the Atlantic and in the eastern Pacific fisheries for over 20 years. Thus we have seen the participatioin of the United States in the tuna conservation commissions known as the Inter-American Tropical Tuna Commission (IATTC) and the International Commission for the Conservation of the Atlantic Tunas (ICCAT).

Mr. Chairman, tuna is a migratory fish. Our fishermen need to be able to pursue tuna unhindered where they might best be found. Placement of tuna under the protections of the Magnuson Act would have the effect of inviting protectionist retaliation from other countries, resulting in an adverse impact on our own industry.

I might add that this is an industry that cannot withstand much more adversity. For many years, it has suffered from unfair foreign trade practices in the form of dumping, subsidized fleets and sub-standard wage and working conditions. Over 12,000 jobs were lost when imports of water-packed canned tuna shut down canneries in San Diego and San Pedro.

Nonetheless, the industry has responded vigorously by investing millions of dollars in new equipment and techniques to improve tuna harvesting and processing, increase yields and cut costs. Tuna landings in 1987 in California represented about 18 percent of volume and 35 percent of value for all state fisheries. We believe 1988 will surpass 1987. Clearly, tuna remains a vitally important component of our state and national economy; more important, I would suggest, than that represented by the recreational fishing interests that seek a Section 103 change.

Our feelings toward contemplated changes in the Magnuson Act can be summed up in one sentence: "If it ain't broke, don't fix it." The Fishermen's Union of America urges you to resist any change pertaining to tuna policy.

STATEMENT OF STEVE MORETON, PRESIDENT, EAST COAST TUNA ASSOCIATION

Mr. Chairman, my name is Steve Moreton, I am the President of M&M Tackle Company in Hyannis, Massachusetts. M&M Tackle Company is a manufacturer and distributor of fishing tackle for the off-shore pelagic fisheries.

I am testifying today as the President of the East Coast Tuna Association (ECTA). The Assocation is a non-profit organization of U.S. citizens and companies involved in all aspects of the Atlantic tuna fishery—fishermen, processors, and members of allied supportive industries committed to promoting sound management of Atlantic tuna and protecting fishermen's access to the resource.

The East Coast Tuna Association is actively involved in funding independent research projects intended to enhance the conservation and management of the Atlantic tuna fishery. This year, ECTA initiated a logbook data gathering program for bluefin tuna handlers, harpooners and rod and reel fishermen. We also are planning to sponsor an additional port sampler for the National Marine Fisheries Service catch and effort data collection program for the Atlantic pelagic fisheries.

The conservation and management of the bluefin tuna resource is of extreme interest to our organization. Even though our membership covers a wide diversity of fishermen and companies in the industry from general permit fishermen to purse seiners to dealers from Maine to Florida, there is complete agreement that the International Convention for the Conservation of Atlantic Tuna's (ICCAT) is the appropriate management authority for bluefin tuna.

The ICCAT has been involved in Atlantic bluefin tuna management since 1974. In 1981 and 1982, ICCAT reduced fishing effort for bluefin tuna to minimum levels of harvest, established size limitations and ended the directed fishery in the Gulf of Mexico. The ECTA is in full support of these ICCAT management restrictions which still are in effect today.

These management measures are beginning to pay off. The 1988 ICCAT report confirmed that the recruitment and survival of young fish (1–5 years) has improved substantially as a result of the quotas established in 1982. The 1988 analysis shows estimates of abundance of each of the ages 1–5 in 1985 are the highest since 1978

and well above the lows of 1981 and 1982. Preliminary values for 1986 and 1987 are even higher.

The 1988 ICCAT report also shows that the decline of middle-sized fish (6–9 years) has been stopped and minor increases in the abundance have been reported. Until the 1982 and more recent year classes enter the spawning stock, the abundance of large fish (10–30 years) will continue to show a decline. This was included in the 1988 ICCAT report which, as a result, recommended that fishing mortality be maintained at its current reduced levels.

The current level of fishing efforts for Atlantic bluefin tuna is limited to a quota of 2,660 metric tons. This annual quota is divided between the U.S., Japan, and Canada as follows: 1,387.3 mt for the U.S., 699.4 mt for Japan, and 573.3 for Canada. The U.S. quota is further divided by NMFS into permit categories for the purse seine fishery, harpoon fishery, rod and reel fishery, handling fishery and incidental longline catch.

The point which we wish to emphasize is that the fishing effort and mortality is limited by the bluefin quota. Fishing within permit categories is shut down as the quota in each fishery is reached. This year, the harpoon fishery was very successful with the quota filled much earlier in the season than it had been in the past. The purse seine fishery has always been successful in catching its quota as well. The harvest levels in the general permit category for the rod and reel and handline fishery depend on the behavioral and feeding activity of bluefin. Environmental changes such as water temperature alone can have a major impact on the location of bluefin and availability to this fishery. The fact that the general permit category is filled one year and not the next is not a valid index of abundance.

Regarding the foreign catch, the Canadian and Japanese fishery harvested their ICCAT quota in 1988. The Japanese longline fishery takes place in the Northwest Atlantic during the Fall and Winter targeting on medium fish, not the giants. In fact, the Japanese catch is used as the principal index of abundance for bluefin that are 3–9 years old.

At this time, we see no evidence that we are facing a conservation crisis. Fishing effort is reduced by a quota well below historical levels, foreign fishing in the Gulf of Mexico spawning area has been stopped, and the status of the younger year classes is improving. The obvious conclusion is that ICCAT's management strategy is working.

The East Coast Tuna Association strongly urges Congress not to alter the international management framework for Atlantic bluefin tuna. Management of highly migratory species like bluefin must remain under the jurisdiction of ICCAT. ICCAT provides the only forum for international cooperation needed to manage bluefin tuna over the entire range of the stock.

The ICCAT management structure also has provided for a balance in the participation of all user groups. Traditionally, one of the U.S. ICCAT Commissioners has come from the commercial tuna fishery, one from the recreational fishery, and one from the federal government. We would encourage Congress to consider requiring this balanced composition for future U.S. Commissioners in ICCAT reauthorization legislation.

The U.S. ICCAT Advisory Panel also is made up of a fair balance of recreational and commercial interests. The same can not be said of the Fishery Management Councils. Furthermore, the Regional Fishery Management Councils are members of the Advisory Panel and attended and participate in the ICCAT meetings abroad as part of the U.S. delegation. We see no reason in changing a management system that has jurisdiction over the entire range of the stock and provides for the full participation of the National Marine Fisheries Service, state fishery agencies, regional councils and all user groups.

The ECTA can not support an amendment to the Magnuson Fishery Conservation and Management Act to include tuna within its jurisdiction. Under the current management system, NMFS has authority to implement ICCAT management measures for bluefin tuna. There is no compelling conservation or management rationale for new legislative authority to regulate the bluefin tuna fishery.

Mr. Chairman, thank you for the opportunity to express the views of the East Coast Tuna Association. I would be happy to answer any questions or provide additional information to assist the Committee on this issue.

Statement of the National Coalition for Marine Conservation

Mr. Chairman and members of the Subcommittee, the National Coalition for Marine Conservation (NCMC) appreciates this opportunity to present our views on

the management of highly migratory species under the Magnuson Fishery Conservation and Management Act (MFCMA) and the Atlantic Tunas Convention Act (ATCA).

My name is Ken Hinman. I am the executive director of the NCMC, a non-profit organization supported by conservation-minded fishermen representing every coastal state in the nation. I am also chairman of the billfish advisory panel to the South Atlantic Fishery Management Council, and served as program coordinator for the International Symposium on Billfish Science and Management held a year ago in Kona, Hawaii.

The NCMC participated in the original Congressional deliberations which resulted in the enactment of the MFCMA in 1976, and which extended jurisdiction over all fisheries within our 200 mile zone—with the exception of the six species of tuna found within our coastal waters. We have since appeared before this Committee and the Senate Commerce Committee, and submitted written testimony on a number of occasions, regarding the exemption of tuna from United States management authority. Our position has been consistent throughout, a position affirmed and stgrengthened by time and our accumulated experience with the management of pelagic fisheries under the MFCMA since 1976. We firmly believe the MFCMA should be amended to include the conservation and management of all species of oceanic fish found off our shores, with no exceptions. The tuna exemption is inconsistent with other US fishery law, and contrary to accepted international practice. It interferes with and severely inhibits efforts to conserve other pelagic fish, as required by the Act. It allows the uncontrolled exploitation of tuna fisheries within the US Exclusive Economic Zone (EEZ), by foreign and domestic fishermen, thereby jeopardizing the long-term productivity of these valuable resources.

The tuna exemption has already taken a toll on fisheries of supreme importance to US fishermen. Two species of fish in the Atlantic—the bluefin tuna and the broadbill swordfish—are today severely overfished; the bluefin because management has been left entirely in the hands of an international organization ill-equipped for timely and effective action, and the swordfish because of the constraints imposed on domestic management efforts by US tuna policy.

We urge Congress to repeal the tuna exemption contained in Section 102, and make whatever other changes are necessary to provide for the management of tuna and other pelagic resources consistent with the conservation objectives of the MFCMA. Including tuna under the Act will allow for more effective management of non-tuna pelagics within the US EEZ; improve monitoring and data collection on tuna fishing and its by-catch, information now lacking; foster the long-term conservation of tuna for the benefit of American fishermen; and enhance efforts to conserve highly migratory species throughout their range.

The debate over tuna management in this country has, from the beginning, been infected with a fundamental misconception; namely that domestic management is incompatible with international cooperation.

The opponents of tuna inclusion argue that tuna can only be effectively managed through international agreement; that domestic management is not just ineffective, but actually a deterrent to international management. This notion is demonstrably false; and quite frankly, it is being exploited by those who oppose tuna managment of any kind, at either the domestic or international levels.

Every other nation which is party to a multi-national treaty governing tuna, such as the International Commission for the Conservation of Atlantic Tunas (ICCAT), claims domestic jurisdiction over tuna. Only the US views a claim to domestic jurisdiction as precluding international management; a veiw it does not hold, curiously enough, with regard to any other highly migratory species.

We endorse the sovereign right of the US (and other coastal nations) to manage highly migratory species within our EEZ, as provided in Article 56 of the United Nations Law of the Sea (LOS) Convention. We also readily acknowledge the need for international cooperation to monitor and regulate fishing on the high seas, as provided in LOS Article 64. It is not an either/or proposition; the two are not mutually exclusive, but rather two halves of a whole.

Domestic management of tuna can complement efforts to obtain conservation agreements in the international arena. Indeed, this is precisely the approach taken by the US with regard to other highly migratory species (swordfish, billfish, salmon, etc.). This approach should be extended to tuna as well. Amending the MFCMA to include tuna is fully compatible with the Act's directive to encourage international cooperation in the management of highly migratory species [Section 2(b)(2)], since it will enhance our credibility and effectiveness at ICCAT and other international forums.

Accordingly, we support continued US participation in ICCAT, through reauthorization of the Atlantic Tunas Convention Act of 1975.

We emphasize that extending US jurisdiction to include tuna is by no means an end unto itself. It must be accompanied by a concerted effort to better coordinate domestic management with international cooperation, and to improve the quality of science which supports management decisions made by US authorities and international commissions.

The bottom line is that we as a nation must be more aggressive in pursuing conservation at home and throughout the range of highly migratory species. To do this, we must take responsibility for managing fisheries within our own EEZ, monitor and collect data on the catch and effort, and initiate conservation measures for all species when appropriate. This will not only enhance our ability to obtain ocean-wide agreements, it is vital to success.

Another misconception advanced by the opponents of tuna inclusion is that there is a recreational/commercial schism on the tuna issue; in other words, that recreational fishermen have something to gain by a change in the law, while commercial fishermen have something to lose. Nothing could be further from the truth. The issue is not one of special interests, but of achieving sound management policies to preserve US fishery resources, for all fishermen, both commercial and recreational.

Tuna are an extremely important commercial resource in this country, as well as a valuable recreational resource. The US billfish fishery is worth hundreds of millions of dollars to the nation's economy. Swordfish has been a staple of offshore commercial fisheries for decades. Both groups of fishermen stand to gain from improved management of highly migratory species. Both stand to lose significantly if our tuna, swordfish and billfish fisheries remain unmanaged.

The US tuna exemption is inconsistent with US policy toward other highly migratory species, and at odds with established international law.

The United States is one of only two countries (the other being the Bahamas) which does not claim extended jurisdiction over coastal tuna fisheries. Section 102 of the MFMCA reads in full: "The sovereign rights and exclusive fishery management authority asserted by the United States under section 101 over fish do not include, and may not be construed to extend to, highly migratory species of fish." (emphasis added)

In Section 3(14) of the Act, "highly migratory species" are defined as tunas. Ostensibly, tuna are excluded from extended jurisdiction for unique biological reasons, i.e., their migratory nature. But how to account for the fact that Annex 1 of the LOS Convention defines the marlins, swordfish and the sharks, as well as the tunas, as "highly migratory species," or that the MFCMA empowers jurisdiction over these other, equally wide-ranging fish?

Clearly, it is not the biology of the tunas which have earned them the lone exemption to US fishery law, but rather the way the tuna fisheries are prosecuted. The sole purpose of the exclusion is to accommodate US fishing fleets pursuing tuna off the coasts of other nations in the Pacific Ocean. The State Department has admitted as much, even as it continues to promote the fiction that it is the fish that are different, not simply who catches them, and where.

Other nations see our tuna policy as not just inconsistent with the remainder of US fishery law, but self-serving and out of step with international law as well. Nations off whose shores American tuna boats fish view this country as wanting to have it both ways; that is, protect fisheries at home for our fishermen, but allow Americans free access abroad, regardless of the laws of other sovereign nations. Again, the US is virtually alone in the world in not recognizing coastal state jurisdiction.

The rationale for the tuna exemption has little to do with enhancing fishery management either in the EEZ or on the high seas, and everything to do with so-called leverage in securing access to fishing grounds for our distant water tuna fleet. But the leverage, if any, comes not from exempting tuna, but from the embargo provisions of the MFCMA and the loss compensation provided by the Fishermen's Protective Act. If securing access for US fishermen is deemed a legitimate interest of the US government, then let Congress find another way to assist the industry, without wreaking havoc on domestic management efforts and undermining respect for US policy in the eyes of the world.

The US tuna exemption is an insurmountable obstacle to the effective management of other pelagic species as required by the MFCMA.

The MFCMA's mandate to manage billfish, swordfish and sharks already puts the US in the business of managing highly migratory species. But the exemption for tuna inhibits our ability to do this, causing nothing but problems for US fishery managers and American fishermen while these fisheries are depleted.

Seven of the eight Fishery Management Councils established by the MFCMA (all but the North Pacific Council) are responsible for managing and conserving large ocean pelagic fish: swordfish, four species of marlin, sailfish, spearfish, dolphin (mahi mahi), wahoo, and several species of oceanic sharks. The Councils began the process of developing separate Fishery Management Plans (FMPs) for billfish and broadbill swordfish in 1977. That process has continually come into fatal conflict with the US tuna exemption, resulting in overfishing and, in the case of swordfish, severe stock depletion.

The Council's ability to conserve populations of billfish and swordfish has been and remains to this day severely limited by their inability to implement measures which impact on tuna fishing. The problem lies in the fact that, though the law draws an arbitrary distinction between the fisheries for marlin, swordfish and shark on the one hand and tunas on the other, these fisheries are inextricably linked by virtue of the type of gear used to capture tuna commercially in the US EEZ.

That gear is the longline, and two facts about the longline fishery go to the root of the problem. First of all, longlines are non-selective; the hooks do not discriminate between, say, a bluefin tuna and a blue marlin. Secondly, billfish, swordfish, and several species of shark, as well as dolphin and wahoo, inhabit the same offshore environment and similar ocean depths as the tuna sought by longliners. The result is a constant and substantial by-catch of these non-target fish.

The official State Department enunciation of present tuna policy is that the US must provide a reasonable opportunity for fishing vessels to pursue tuna in the EEZ, and impose the least burden on such vessels while also achieving conservation and management of the species covered by Council FMPs developed under the MFCMA. This has not been possible, simply because the Councils have not found a way to significantly reduce the killing of billfish and swordfish on tuna longlines while satisfying these criteria.

THE TUNA EXEMPTION UNDERMINES BILLFISH CONSERVATION

The longline by-catch of non-tuna species can be substantial. At the height of the Japanese tuna longline fishery in the Gulf of Mexico in the late 1970s, the incidental capture of marlins reportedly totalled 5,300 fish a year, probably a conservative estimate. To minimize this by-catch and reduce conflicts between Japanese and American fishermen, the five Atlantic Councils produced a Plan which would have closed the Gulf to longliners from May to October and the EEZ along the Atlantic Coast during the months of June through September.

The Plan was rejected by the Administration, which told the Councils that any billfish regulation which imposed a restraint on tuna fishing was contrary to US policy. Instead, a Preliminary Management Plan (PMP) was developed by the National Marine Fisheries Service (NMFS) which prohibits foreign longliners from retaining any billfish, swordfish and sharks caught in US waters. Unfortunately, most are dead upon release, and of the rest, many are presumed to die shortly thereafter. The conservation impact of the non-retention rule is modest as long as longline effort remains high.

The number of foreign longline vessels operating in US waters has declined in recent years, but the tuna/longline problem has not diminished—in fact, it is worse than ever. The rising demand for fresh tuna in the US, along with the decline in the swordfish fishery, has sent many American fishermen on the east coast chasing tuna, principally yellowfin and bigeye. The extraordinary increase in US tuna longlining the 1980s has brought a corresponding rise in the by-catch of marlin, sailfish and other pelagics. The Councils have no more authority to limit the amount of tuna longlining by American fishermen than they do foreign fishermen.

The Councils finally did implement an Atlantic Billfish FMP in 1988, designed to preserve marlin and sailfish in abundance for the multimillion dollar recreational fishery. The FMP contains limits on the recreational catch of billfish, promotes the live-release of fish by rod and reel anglers, and outlaws the capture and sale of billfish by commercial vessels. This essentialy places the same restrictions on domestic longline vessels as placed on foreign vessels by the PMP, i.e., they cannot retain billfish. Though the no-sale provision does reduce the incentive for commercial fishermen to keep billfish taken alive, it does not reduce billfish/longline interactions. NMFS estimates that about 50% of the billfish hooked in the domestic tuna longline fishery are dead when released.

The yellowfin tuna longline fishery in the Gulf of Mexico is putting unprecedented pressure on the pelagic resources of that area. The catch of yellowfin in the Gulf has grown from 27,000 pounds in 1981 to 3,257,000 pounds in 1985 to 17,300,000 pounds in 1988. (see Appendix A) The National Coalition for Marine Conservation

estimates that as many as 12,000 billfish (marlin, sailfish and spearfish) may be killed in the yellowfin tuna longline fishery each year. This is based on an estimated 250 longliners active in the fishery, making an average of 100 sets during the course of a fishing season (both estimates by the South Atlantic Fishery Management Council and contained in the Source Document for the Atlantic Billfish FMP, 1988) and hooking an average of .98 billfish per set (from NMFS observer reports through 1987). That makes a total of 24,500 fish hooked. Since the survival rate for billfish on longlines is approximately 50%, we estimate that as many as 12,000 billfish are killed.

The NMFS estimate is lower—about 5,000 fish. However, we believe their estimate to be quite conservative, since it is taken primarily from swordfish logbook data (swordfish longliners fish at night and billfish are day-feeders). The discrepancy between the NMFS estimate and our own only underscores the problem of getting an accurate account of the catch and by-catch from the unregulated tuna fisheries.

Still, even by the most conservative estimates, thousands of billfish are being killed and wasted in the tuna longline fishery, more fish than are landed by all US recreational fishermen combined. This greatly diminishes the effectiveness of the Atlantic Billfish Plan, at best, and is contributing to the depletion of billfish stocks at worst. The Billfish Plan is designed to protect the valuable billfish resource, but this goal is undermined by the tune exemption and our hands-off policy toward longlining.

The MFCMA should be amended to include tuna so that the Councils and NMFS have the authority to include in the Atlantic Billfish FMP 1) provisions aimed at obtaining an accurate assessment of the longline by-catch, and 2) measures to minimize the amount of by-catch. These measures would include:

Requiring US tuna longline vessels to report all fish hooked

Placing observers on an adequate number of tuna boats to insure against underreporting, and provide a statistical valid sample of by-catch in the fishery

Working with the tuna industry, under the NMFS Conservation Engineering Program, to make longlining more selective, through changes in the gear and/or the way it is deployed

Developing regulations to reduce the by-catch, such as closing certain ocean areas at certain times to longline activity, and assisting managers in devising additional wages to minimize longline interactions with billfish, augmented by studies into the feeding habits and migrations of billfish, and the depths and water temperatures they inhabit.

THE TUNA EXEMPTION CONTRIBUTES TO SWORDFISH OVERFISHING

Efforts to manage and conserve Atlantic swordfish, which began in earnest in 1980, have been continually stymied by the tuna exemption and the inability to impact tuna longlining. Today, the swordfish resource is severely overfished: "Spawning stock biomass has declined continuously since 1979 and is currently about 40% of the 1978 level. The current rate of fishing mortality will cause a continued decline in the spawning stock, placing the stock in increased jeopardy of recruitment failure." (ref. "Swordfish Stock Assessment Review Panel Report," April 1989; see also Appendix B)

If the Councils were allowed to restrain tuna longlining to even a minimal degree, the swordfish decline could have been arrested several years ago, and the nation and the industry would not be facing an "emergency situation" in this fishery, as we are now.

In 1985, the Councils developed a plan featuring a Variable Season Closure (VSC) system, which would have suspended swordfishing during certain periods of the year, and limited all tuna longlining to daylight hours during these closures to reduce the by-catch of night-feeding swordfish. The VSC concept was approved in 1986 by the Administrator of the National Oceanic and Atmospheric Administration (NOAA), the parent agency of NMFS in the Department of Commerce. But before dates for the closures were finalized, the Federation of Japan Tuna Fisheries Cooperative Associations filed suit against the Secretary of Commerce, claiming the measure violated US law by unreasonably restricting their opportunity to fish for tuna in the US EEZ. In addition, American tuna fishermen complained the limits on night-time longlining would hurt them economically, too. NOAA/NMFS/DOC ultimately bowed to this pressure, citing the tuna exemption in Section 102, and rejected the plan.

Fishing for swordfish continues without restraint, in large part due to the unreasonably narrow management options afforded by the tuna exemption, making a

total collapse in the fishery, with its attendant economic and social dislocations, more and more likely. The Chairmen of the five Councils involved in developing the swordfish FMP have stated that "the barriers to management presented by . . . Section 102 must be recognized as the major contributing factor" in the sorry state of swordfish, and express grave doubts about being able to fully rebuild the stock without amending the Act to include tuna. Here I refer the committee to the "Inter-Council Position Paper on Amendments to Section 102 of the MFCMA," dated June 26, 1989, and request that this document be made a part of the record of this hearing.

SHARKS THE NEXT VICTIM?

The slow growth and low reproductive rate of most species of oceanic sharks makes them extremely vulnerable to overfishing. The commercial and recreational fisheries for sharks are expanding very rapidly, with a dramatic increase in landings in recent years. Sharp increases are attributable to growing demand for shark fins for export to Asian countries. Commercial shark landings in the southeast went from less than a half million pounds in 1979 to nearly 10 million pounds in 1988, according to NMFS.

There is widespread concern among the conservation and fishing communities that the shark fisheries may soon be depleted if catches continue unregulated. The Mid-Atlantic Fishery Management Council (MAFMC) is taking the lead in drafting an FMP for Atlantic sharks to prevent overfishing. Again, because of the unique biology of sharks, preventative action is vitally necessary to avoid quick depletion of the stocks. The MAFMC in April requested emergency action by the Secretary of Commerce to end the practice of shark "finning," to set a quota for the commercial fishery, and to limit the catch of recreational fishermen.

Sharks are also known to be a regular by-catch in tuna longline fisheries. To the extent that the longline mortality contributes to the overfishing of shark populations, and that this portion of shark mortality cannot be regulated, the effectiveness of shark conservation efforts will be diminished.

The tuna exemption leaves a void in tuna conservation and jeopardizes the long-term productivity of the commercial and recreational tuna fisheries.

When Congress passed the MFCMA in 1976, the high seas tuna fleet dominated the US tuna industry, if not the global industry, while the US coastal fishery for tuna was relatively insignificant. That situation has changed dramatically in the ensuing years. The US coastal tuna fisheries, both commercial and recreational, with all of their fishing activity taking place in the EEZ, have emerged as fisheries of tremendous value to the national economy. These fisheries, and the tuna resources they depend on, must be protected. Under current law, they aren't.

Our hands-off policy on tuna fishing leaves responsibility for conserving tuna stocks solely in the hands of international organizations, in this case ICCAT. Although ICCAT was established for the purpose of managing tuna and tuna-related species, political pressure from member nations prevents it from doing so unless faced with an undeniable crisis, such as occurred with bluefin tuna. The bluefin experience speaks poorly for ICCAT's ability to manage tuna fisheries.

Where international management of highly migratory species is concerned, the MFCMA is clearly self-contradictory. In its preamble [Section 2(a)(4)], the Act gives as a principal reason for extended jurisdiction the ineffectiveness of international fishery agreements in conserving ocean fisheries. Yet later on, it declares that only international agreements can effectively manage tunas. The authors were right the first time.

Tuna quotas in the Atlantic are set by ICCAT. The fact that international organizations can only encourage voluntary participation and compliance tends to ensure that recommended conservation measures will reflect only what is acceptable to all nations active in the fishery, including those with limited interest in conserving the stocks for the long term benefit of other member nations.

INTERNATIONAL CONSERVATION OF BLUEFIN ISN'T WORKING

ICCAT was unwilling and/or unable to reverse the dramatic decline in Atlantic bluefin tuna populations before they bottomed out at perilously low levels in the late 1970's. The timid measures adopted in 1982, weakened by political pressure on behalf of economic interests, have failed to put this threatened species on the road to recovery. ICCAT scientists themselves report that the spawning stock is still shrinking, while the number of young fish, on which the recovery depends, remains dangerously low. (see Appendix C) Most knowledgeable observers agree that the current quota set by ICCAT is much too high to affect a recovery, and that the stock

still teeters on the brink of collapse. Yet ICCAT is content to maintain the status quo indefinitely.

A key feature of the ICCAT conservation agreement is a prohibition on directed fishing for giant bluefin in the Gulf of Mexico, a prime spawning area for this threatened species. The incidental catch of bluefin by the yellowfin tuna fishery is known to be quite substantial. A biologist monitoring bluefin landings for NMFS reported to ICCAT in 1987 that 1,755 giant bluefin were killed and discarded by the yellowfin fishery, above and beyond the by-catch permitted under the US share of the ICCAT quota. This unreported mortality, widely believed to be a conservative figure, would have put the US over its annual quota by nearly 20 percent that year. The high price being paid for bluefin, inflated by its rate status, encourages fishermen to actually target bluefin and retain only the biggest fish under their by-catch quota, discarding the smaller ones. (In addition, it is suspected that a sizable number of small to medium bluefin are being landed as other species on the east coast.) Without a system for monitoring the tuna fisheries, and the authority to control the by-catch, we cannot protect the spawning stock with any degree of confidence.

A VOID IN TUNE MANAGEMENT

Most of the attention has been on bluefin conservation, given the disastrous condition of the stock. But other species of tuna, particularly yellowfin and bigeye, are now the bread and butter of the domestic tuna fishery, and whether these stocks are managed for long-term productivity or short-term profit should be the concern of US fishery managers. Unfortunately, they are powerless to protect these fish from overfishing because of the tuna exemption. As it is now, they are dependent on international action, which has never been taken until, like the bluefin, the stocks are in dire jeopardy.

The yellowfin fishery, which has expanded due to the increasing demand for fresh tuna in the US and the decline of other pelagic species, particularly swordfish, is cause for special concern. It is an extremely rapidly developing fishery, growing exponentially from year to year (see Appendix A). The yellowfin is also believed to be the least migratory of the tuna species, and therefore more susceptible to local depletion. NMFS has expressed concern that the Gulf stock can be overfished. Walter Nelson, chief scientist at the NMFS Southeast Fisheries Center in Miami, which is responsible for pelagic research in the Atlantic, has said: "If you're fishing at a pressure that consistently crops off the fish as they move into the Gulf, then, yes, you will move the whole population of the Gulf into a fairly low level. You have to think of the Gulf as any other fishing lake. If one hot spot is getting all the attention, then you could eventually take all the fish from that hole. The key question is, 'How long would it take fish from other parts of the lake to move into that spot and replenish it?' That's a definite concern." (ref. SOUTHERN SALTWATER MAGAZINE, May/June 1989)

An increasing number of experts are proposing that long distance migrations of many highly migratory species, including tuna, are the exception rather than the rule; that in fact populations of fish found within large EEZs, such as that of the US, may be resident populations—juveniles feeding and growing, or adult fish spawning. (see Appendix D) If this is true, we can overfish them or, if we're smarter, we can manage them.

Unilateral action by the US to conserve the tuna fisheries in our EEZ would make a significant impact on reducing overall fishing pressure on the stocks, and could contribute substantially to obtaining international action through ICCAT and other forums.

Under ICCAT regulations, the US monitors the catch of bluefin tuna. No such monitoring effort exists for yellowfin, bigeye and other species. Consequently, no data base is being compiled with which to measure the condition of these fisheries, and on which to base management measures, either through ICCAT or US regulations. Including tuna management under the MFCMA would give NMFS and the Councils the ability to develop comprehensive data collection programs for the tuna fisheries. This carries with it, of course, an obligation to provide NMFS with sufficient funding to develop this data base.

US management of highly migratory species should be coordinated with and complement international efforts to conserve the species throughout their range.

At the beginning of our testimony, we stressed that domestic and international management are completely compatible; that the one should complement and enhance the other. This is the rule in global fisheries management, not the exception.

We also endorsed reauthorization of the Atlantic Tunas Convention Act, which sanctions US involvement in ICCAT. The principal benefit of ICCAT participation to the US, our fishing industries, and the fisheries utilized by American fishermen is the stimulation and exchange of scientific and statistical information on Atlantic tunas and the tuna fisheries, and to a somewhat lesser extent on swordfish and billfish.

The drafters of the ICCAT treaty recognized the need for sufficient data to accurately assess stocks of tuna. Unfortunately, ICCAT was not endowed with an independent data gathering and analysis capability. The Commission relies instead on science contributed by member nations and recommendations by a standing committee of scientists representing those same nations. The result is that scientific assessments are tainted by national interest politics, in the selective presentation and analysis of data.

We suggest that Congress include in its reauthorization of the ATCA a directive to the Administration to undertake a review of the ICCAT treaty with regard to negotiating a re-structuring of the Commission so that the scientific function is insulated from political (non-scientific) considerations in a separate, centralized entity. The North Atlantic Salmon Conservation Organization, for example, utilizes the independent and highly respected international Council for the Exploration of the Sea, or ICES. We further recommend that Congress act to ensure that sufficient funds are provided to NMFS to support the level of research necessary for good management.

In addition, we urge the US to work toward establishing a trans-Pacific fisheries commission to collect and analyze fisheries data from all participating fishing and user nations and to recommend appropriate conservation measures. ICCAT has serious shortcomings, but the Pacific doesn't even have an ocean-wide fisheries forum. The recommendation to create one received broad support from the participants at the 1988 International Billfish Symposium. (ref. "Planning the Future of Billfish: Research and Management in the 90s and Beyond," Kona, Hawaii, August 1–5, 1988)

ICCAT and other international organizations have so far done a poor job as the sole authority for managing highly migratory species. Our continued participation in ICCAT would be enhanced by extending US management jurisdiction to tunas. This would allow the US to take a leadership role in promoting international conservation measures, rather than waiting for others to act. It would enable the US to enact measures which are more stringent than those recommended by ICCAT, while in keeping with international conservation objectives. As the ATCA is interpreted now, regulations imposed on US fishermen cannot be more restrictive than those recommended by ICCAT, and as we have seen, these are likely to be the most liberal, not the most cautious.

We recommend additional changes in the ATCA and the MFCMA which would further enhance the effectiveness of management at ICCAT. The Fishery Management Councils should be given official representation on the US delegation to ICCAT. To facilitate Council development and approval of FMPs for highly migratory species, which are the responsibility in the Atlantic of all five Councils, the MFCMA should be amended to allow multi-Council Plans to be approved by a vote of all Council members acting as one super-Council. A majority of Council members involved would make policy, rather than requiring the unanimous consent of all Councils, a process which permits a single Council/region to thwart the will of the majority and delay action.

SUMMARY

The Magnuson Fishery Conservation and Management Act's tuna exemption has inhibited past efforts to manage tuna, swordfish and billfish stocks, and jeopardizes future conservation efforts for these species, as well as for sharks. The Atlantic bluefin tuna and the Atlantic swordfish are severely overfished. Consigning sole responsibility for the conservation of tunas to international management has failed. The severe restraints placed on domestic management by exempting tuna fishing has thwarted efforts to conserve other pelagic species.

The National Coalition for Marine Conservation recommends the repeal of Section 102 of the MFCMA in order to extend US management authority to all species of fish found within our EEZ, without exception. We encourage continued US participation in ICCAT, which we believe will be enhanced through the inclusion of tuna under the US jurisdiction, through reauthorization of the Atlantic Tunas Convention Act. We suggest appropriate changes in these laws to improve coordination between US and international efforts to conserve highly migratory species.

Working for the Nature of Tomorrow

NATIONAL WILDLIFE FEDERATION

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August 28, 1989

The Honorable Ernest F. Hollings
Chairman
National Ocean Policy Study
Committee on Commerce, Science, and Transportation
U.S. Senate
125 Russell Senate Office Building
Washington, DC 20510

Dear Chairman Hollings:

The National Wildlife Federation (NWF) respectfully requests that the following comments be made part of the record for the July 20, 1989 Subcommittee hearings on highly migratory fish species management under the Magnuson Fishery Conservation and Management Act (MFCMA; P.L. 94-265) and the Atlantic Tunas Convention Act (ATCA; P.L. 94-265, § 405). These comments supplement our written comments of May 18, 1989, in which we supported both the reauthorization of MFCMA and amending the MFCMA to allow for tuna management.

The NWF is the nation's largest, not-for-profit, conservation-education organization with 5.8 million members and supporters throughout the U.S. and in 51 state- and territory-wide organizations which include about 4,500 local conservation organizations. The NWF consistently supports use of our nation's marine fisheries resources when that use is based on sound science and informed management.

The NWF joins five Regional Fishery Management Councils (New England, Mid-Atlantic, South Atlantic, Gulf of Mexico and Western Pacific) and other conservation organizations in calling for repeal of Section 102 of the MFCMA, which excludes tuna from MFCMA-management. If tuna stocks and other highly migratory marine species inhabiting the offshore waters of the U.S. are to be properly conserved and managed for the benefit of the nation, the U.S. must act unilaterally to regulate the use of these resources within its Exclusive Economic Zone (EEZ). The Council fishery management plan system, in conjunction with continued U.S. participation in the International Commission for the Conservation of Atlantic Tunas (ICCAT), and other international bodies, appears to offer the best means for assuring the long-term conservation of tuna.

The NWF, however, remains concerned about: (1) the failure of existing international tuna management arrangements, specifically ICCAT, in protecting Atlantic bluefin tuna stocks from overharvest and stock decline, (2) the lack of any international tuna conservation efforts throughout the central, eastern and western Pacific Ocean, and (3) the inability of the Regional Councils to effectively protect and manage other highly migratory marine species, such as swordfish, billfish and sharks, as a result of the current U.S. tuna policy.

The Importance of Tuna to the U.S.

Prior to passage of the MFCMA in 1976, the principal tuna fisheries in which the U.S. participated were in international waters. While the greatest percentage of tuna caught by the U.S. fleet today still occurs outside its EEZ, a significant coastal fishery for tuna within the U.S. EEZ now exists. The last decade has seen an exponential rise in the domestic commercial fisheries in the U.S. EEZ. For example, in the southeastern U.S. (South Atlantic and Gulf of Mexico) alone the tuna catch has increased seven-fold since 1980, and the yellowfin tuna catch in this area has gone from less than 0.2 million pounds in 1980 to 8.8 million pounds in 1987[1,2]. It is estimated there are almost 9,000 U.S. commercial vessels that fish for tuna, either full or part-time, in the U.S. EEZ. These vessels landed an average of almost 30 million pounds of tuna worth over $60 million at ex-vessel prices per year between 1982 and 1986[3].

In addition to the commercial fleet, there is also a large and rapidly expanding recreational fishery for tuna and related species. Although reliable estimates are lacking as to the proportion of the 72 million fishing trips taken each year by marine recreational anglers in the U.S. involving tuna fishing, it is estimated that direct recreational expenditures related to tuna fishing in the U.S. EEZ exceed $260 million annually[4]. In fact, nearly half of the large pelagic species targeted by North

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[1]Linda Hudgins, "Structural Change and the Economic Case for Inclusion of Tuna Under the Magnuson Act: Prosperity and Value in U.S. Coastal Fisheries." Papers in Public Policy No. C-15. Economics Department, University of Notre Dame, Indiana. 58p.

[2]NMFS/NOAA Tuna Newsletter #90, August 1988.

[3]Hudgins, p. 12.

[4]Hudgins, p. 26.

Carolina anglers in 1987 were tunas[5] and one third of the charter boats in southern California reported catching tuna in 1985[6].

Clearly, tuna is an extremely important commercial and recreational living marine resource contributing significantly to the economic and social well-being of the nation. However, international management arrangements are failing to provide for sufficient conservation of these resources. Therefore, if the U.S. is to protect this resource adequately, it must take immediate action to conserve the tuna resources off its coasts.

Current U.S. Tuna Policy

Currently, tuna is the only marine fishery within the coastal waters of the U.S. that does not fall under the jurisdiction of the U.S. government. Only recently has the U.S. recognized--albeit implicitly by its participation in the South Pacific Tuna Treaty--the jurisdictional claims of other coastal nations over tuna within their EEZs. The rationale for this tuna policy is, in part, based on the premise that tuna is such a highly migratory fish, traversing thousands of miles during its lifetime that it does not reside within the juridical boundaries of any one coastal nation. Consequently, it is our policy that no one nation can claim exclusive sovereign rights over tuna or, for that matter, effectively manage and conserve tuna stocks independently.

From a biological perspective, the best way to conserve tuna stocks is to manage each stock as an unit throughout its entire migratory range. The drafters of the Third United Nations Convention on the Law of the Sea (UNCLOS III) recognized the validity of this approach when they encouraged its signatories to participate in, or establish, international organizations promoting conservation and optimum utilization of highly migratory species. While UNCLOS III stresses the importance of international cooperation in managing these species throughout their entire range, it does not preclude nations from also establishing their own management strategies to regulate these same species in their EEZs. In fact, the NWF submits that the most successful conservation and management strategy for highly migratory species is one that blends both vigorous international

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[5]John R. Maiolo, "Profiles of Recreational Billfishermen: Implications for Management," cited in Michael K. Orbach and John R. Maiolo, "United States Tuna Policy: A Critical Review." Report to the South Atlantic Fishery Management Council under Technical Assistance, Contract #SA-80-02-SSA (e3), Amendment #7, 1988. 29p.

[6]U.S. Department of Commerce cited in Hudgins p. 33.

cooperation by all involved fishing nations with that of individual regulatory approaches framed by each nation.

International Tuna Organizations Fail to Conserve Tuna

To date, the U.S. has relied almost exclusively on international arrangements to conserve and manage tuna resources, both outside and within the U.S. EEZ. Realistically, however, international management of any transboundary marine resource, be it marine mammal, northwest Atlantic groundfish, or tuna, has proven highly problematic and largely unsuccessful. There are currently only two international organizations with responsibility for the scientific study and management of tuna resources. These are the Inter-American Tropical Tuna Commission (IATTC), whose mandate covers the eastern Pacific Ocean, and ICCAT, whose mandate covers the entire Atlantic Ocean and Mediterranean Sea. Both organizations share the primary objective of conserving tuna stocks to achieve and maintain sustainable yields.

While IATTC was initially established and run primarily as an international tuna management arrangement until 1979, the inability of its member nations to reach a consensus on a management system has precluded IATTC from achieving its goals. Consequently, IATTC is no longer an international tuna regulatory body but rather an international tuna scientific commission. This has left the eastern Pacific, along with its neighboring regions of the central and western Pacific, without a tuna management regime since 1979.

The result is that much of the tuna fishery in the Pacific Ocean is unregulated. Without a management safety net, its continued viability is in jeopardy. Although the abundance of some tuna stocks, particularly yellowfin tuna, remain high and catches good, fisning effort on these stocks in the eastern Pacific is increasing. If yellowfin stocks are to be maintained at high levels, a management plan to control the expanding fishing effort will be necessary. Preventive measures to avoid overfishing of these stocks should be taken now, both internationally and at the national level, rather than waiting for the stocks to be overfished and seriously depleted. The U.S. could play an important role in facilitating this process by redefining and implementing a tuna conservation and management regime of its own, while, at the same time, revitalizing its role in international tuna conservation efforts.

Unlike IATTC, ICCAT continues to attempt to manage the international tuna resources of the Atlantic Ocean. ICCAT is comprised of 22 member nations, each bringing to the Commission their own biological, economic, social and political concerns about tuna conservation and management. Since ICCAT depends on the voluntary participation and compliance of its member nations,

recommended conservation measures will reflect what is acceptable to all nations active in the fishery. If any recommended measure is not acceptable to a member nation, as a result of their biological, economic, social or political concerns, that nation may file a formal objection, exempting it from having to abide by the conservation measure. In order for the conservation measure to be effective, however, it is essential that all member nations unanimously agree to abide by the measure. Therefore, in reaching a consensus on conservation measures, ICCAT consistently yields to the will of the "lowest common denominator", whether it be to the benefit or the detriment of the resource.

The Atlantic Bluefin Tuna Stocks are Severely Overfished and are Reaching Dangerously Low Levels

Unfortunately, ICCAT's actions historically have been detrimental to those resources that require protection the most. The present status of the Atlantic bluefin tuna, particularly the western stock, is a classic example of the damage that can be done to a fishery when economic and political considerations of member nations outweigh the overall conservation goals of the international organization. In 1982, the National Marine Fisheries Service circulated a final Environmental Impact Statement and Regulatory Impact Review for the United States Atlantic Bluefin Tuna Fishery which included the following statement:

> Since the early 1970's the reports of the Commission's (ICCAT) Standing Committee of Research and Statistics (SRCS) have highlighted disturbing trends regarding Atlantic bluefin tuna stocks. The Commission was informed in 1970 and 1971 of the very sharp decline in catches of large bluefin and the substantial quantities of very small bluefin being caught. In subsequent years, the SCRS noted the decreasing numbers of large fish throughout the Atlantic, the continuing absence of medium size fish, and the increasing average size of large fish[7].

Recognizing the deteriorating condition of the bluefin tuna fishery, ICCAT declared a "moratorium" on fishing in the western Atlantic in 1981. During the "moratorium" there was an allowable harvest of 800 metric tons for stock monitoring purposes. Economic pressure and international political considerations subsequently and steadily raised the monitoring allocation, first to 1,160 metric tons in 1981 and then to 2,660 metric tons in 1982. This annual allocation has remained at 2,660 metric tons

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[7]Cited from "The Inter-Council Position Paper on Amendments to Section 102 of the Magnuson Conservation and Management Act," June 1989. p. 8.

since 1982 and is distributed between the U.S., Canada, and Japan. The U.S. quota alone accounts for 52% of the total allocation.

While this harvest continues, the western Atlantic stock of bluefin tuna continues to decline alarmingly. In 1988, ICCAT's SRCS determined that 1987 western Atlantic adult stocks of bluefin tuna (ages 10 - 30) were approximately 30% of the 1970 stocks; ages 6 - 9 approximately 40%; and ages 1 - 5 (for 1985) approximately 31%. The ICCAT data also show a decline in catch by age class[8]. Of the three nations fishing in the western Atlantic, only Japan has fulfilled its quota of 699.4 metric tons. For the last two years, despite 25,000 licensed fishing vessels at sea, the U.S. has taken only 70% of its alloted quota. This confirms that the fish are simply not there to be caught.

Clearly, the Commission has not fulfilled its primary objective under the ICCAT treaty of recommending measures for maintaining tuna stocks at levels that can support maximum yields on a sustained basis. Rather, the Commission has elected to maximize current yields for the short-term gain of a few nations. If the U.S. is truly interested in ensuring the survival and perpetuation of its western Atlantic tuna fishery, it must take steps now to include tuna under the MFCMA. Not only would inclusion of tuna under MFCMA allow the U.S. to become much more active and play a more aggressive role in protecting the tuna resources off it's coast, but it would also enable the U.S. to strengthen and enhance important data collection programs significantly. These efforts would, in turn, result in a substantially expanded international data base, and enable ICCAT and other international tuna organizations to base their conservation and allocation decisions on more comprehensive and accurate information.

The U.S. Must Squarely Address the Issue of Incidental By-Catch of Swordfish and Other Migratory Species by Tuna Long-liners

One of the most serious flaws of U.S. tuna policy is that it hamstrings the Regional Management Councils' ability to conserve populations of other highly migratory species, such as billfish, swordfish and shark. The problem lies in the fact that while these other species occupy the same ecological niche as tuna and are often caught by the same gear type and by the same fishermen, they have been included under the regulatory regime of the MFCMA; while tuna has not. Thus, a major shortcoming of the U.S. tuna

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[8]Cited from "The Inter-Council Position Paper on Amendments to the Magnuson Fishery Conservation and Management Act," June 1989. p. 9.

policy is that it interferes with and severely inhibits our nation's efforts to conserve other highly migratory fish.

Since 1980, the five East and Gulf coast Councils have attempted to develop separate Fishery Management Plans (FMPs) for billfish and swordfish. The major obstacle faced by the Councils in developing and implementing these FMPs is that the management tools they intend to use to conserve and manage billfish and swordfish must not interfere with the tuna fishing activities of domestic and foreign fishermen. By virtue of their shared habitats and the type of fishing gear, highly migratory species such as billfish, swordfish and tuna, are inextricably linked. A large percentage of the U.S. fleet uses longlines to target tuna, particularly yellowfin. Because longlines are not selective, they result in catches of several different large pelagic species other than tuna, such as billfish, swordfish.

Since tuna fishing in the U.S. EEZ is largely unregulated, comprehensive projections of the amount of billfish and swordfish caught incidentally by U.S. and foreign tuna longliners are lacking. Nonetheless, as the number and effort of domestic longline tuna fishermen continue to increases, so too will the amount of incidental bycatch. The uncertainty surrounding the magnitude and impact of this bycatch is especially worrisome when the survival of a fishery is already being threatened--as is the case of swordfish.

On April 20-21, 1989, a panel of marine biologists expert in the field of large pelagics led by Dr. William Fox of the University of Miami reviewed a swordfish stock assessment report developed by the NOAA Southeast Fisheries Center. Based on the findings of the report, this panel unanimously agreed the entire northern Atlantic stocks of swordfish are seriously stressed. In part, the review panel concluded:

> Spawning stock biomass has declined continuously since 1979 and is currently about 40% of the 1978 level. The current rate of fishing mortality will cause a continued decline in the spawning stock, placing the stock in increased jeopardy of recruitment failure (p.2).

Because this assessment is based on 1987 data, the panel considers it "overly optimistic," noting that heavy fishing pressure was maintained throughout 1988 and into 1989, depleting the stock even more. The panel, thus, recommended a management goal of rebuilding the spawning stock to a safe level within five years. To do that they state would require <u>at least</u> a 78% reduction in catch throughout the northwest Atlantic fishery. When a fishery is this close to collapse, all catch, be it directed or not, must be accounted for and stringently regulated.

Swordfish, too, is an important commercial and recreational fishery, and the U.S. is committed to the species' conservation and management through the FMP process. If this FMP is to be effective, however, the U.S. must account for all factors affecting the fishery and aggressively regulate those factors within its authority to control--such as incidental bycatch. In order to accomplish this, however, the U.S. must change its tuna policy. Until the U.S. alters this policy, incidental bycatch of swordfish and other nationally-important highly migratory species will continue to go unchecked, rendering current attempts to manage and conserve these fisheries totally ineffective.

Conclusion

Those who argue against the inclusion of tuna under MFCMA contend: (1)its inclusion is neither consistent with international law nor current U.S. fishery policy, (2)tuna stocks are already adequately protected through international tuna arrangements and national regulation would only undercut these efforts, and (3)current tuna policy does not seriously inhibit the Regional Councils' ability to conserve and manage billfish and swordfish. These arguments clearly are insupportable. International law, as codified by UNCLOS III, in no way precludes nations from managing highly migratory species within their own EEZs. It merely urges nations to cooperate at an international level to conserve these resources. Nor do the actions of other nations claiming jurisdiction over highly migratory species suggest that a change in the U.S. tuna policy would be unacceptable international practice.

The fact that the U.S. claims sovereign rights over all highly migratory species with the exception of tuna is internally inconsistent and self-defeating. Tuna stocks, particularly those of the western Atlantic bluefin tuna, have not been adequately conserved, but rather are heading for stock collapse. National conservation efforts and commitment by the U.S. to re-write its tuna policy can only strengthen international tuna arrangements, such as ICCAT. In doing so, the U.S. would be able to provide much needed data as well as send a powerful message to the international community at large that the U.S. is serious about tuna conservation. There is no denying that the current U.S. tuna policy has been, and remains to be, the major impediment to the successful development and implementation of the Regional Councils' billfish and swordfish FMPs.

The National Wildlife Federation appreciates the opportunity to provide these comments.

Sincerely,

Steven N. Moyer

Steven N. Moyer
Legislative Representative-Fisheries
Fisheries and Wildlife Division

Statement of
William W. Paty, Chairman/President
Pacific Fisheries Development Foundation

Submitted to the

U.S. Senate
Commerce Committee
With Regard to Reauthorization of the Magnuson Act

July 20, 1989

Mr. Chairman and members of the Senate Committee on Commerce/House Subcommittee on Merchant Marine and Fisheries, on behalf of the Directors of PFDF, I would like to take this opportunity to give you some information about the Foundation and its role in the development of fisheries in the Pacific Islands. I ask your consideration of our request for line-item funding under the Magnuson Act.

Fisheries are a primary natural resource in the Pacific Islands, and the importance of that resource extends beyond the economies of Islanders to international markets. Countries with investment interests in Pacific Islands fisheries include Norway, Denmark, Japan, Taiwan, Canada, U.S., S. Korea, China and France. As an example, in Micronesia alone Japan has been investing at least $6 million a year in goods, services and construction of marinas, docks, cold storages, etc.

The pursuit of U.S. economic interests was the initial impetus that brought about PFDF. The Foundation was established in 1974 for the purpose of developing the tuna resources in the western, central and south Pacific. Incorporated as a private non-profit agency, PFDF's members consist of representatives of governments of U.S.-affiliated islands and U.S. west coast tuna industry associations. Board members of PFDF are heads of the following governments and industry associations: American Samoa, Guam, Northern Marianas, Federated States of Micronesia, Palau, Marshall Islands, Hawaii, American Tunaboat Association, ILWU Fishermen's Union, Tuna Research Foundation, American Fishermen's Research Foundation, U.S. Tuna Foundation, and Western Fishboat Owners Association.

The Foundation began with an emphasis on industry development, and in its first six years (1975-1981) conducted exploratory projects that established the U.S. purse seine and albacore troll fisheries in the north central and western Pacific. In the mid-1980's, two PFDF projects led to the development of U.S. albacore fisheries in the South Pacific.

PACIFIC FISHERIES DEVELOPMENT FOUNDATION

P.O. Box 2359, Honolulu, Hawaii 96804
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Since 1981, PFDF's main focus has been on Island-based fisheries development. Over 93 projects to promote economic self-sufficiency have been implemented with support from U.S. Federal funds and Island governments. These projects include new infrastructure, fisheries training, marine resource surveys, and mariculture development. Exports of small amounts of fresh fish have started, and some Islanders are now beginning to enter longline and purse seine fisheries which have been controlled by U.S. mainland and foreign companies. The outlook for Island-based development is now extremely good.

ADMINISTRATION AND MANAGEMENT

PFDF has functioned as a regional institute for grants administration, information exchange, networking and technical assistance. Since the general environment is similar throughout the U.S. Pacific, most development projects have regional applicability. For this reason, PFDF has found it productive to bring Island Fishery Officers together to discuss problems, plans and opportunities. Some of the services provided by PFDF are:

1. Regional Planning. While each island jurisdiction develops its own long-range plans, the Foundation periodically reviews these and puts together a multi-year regional document.

2. Grants Administration. PFDF disburses S-K funds to project directors, oversees procurement, and ensures that projects are implemented according to applicable rules and regulations.

3. Technical Assistance. PFDF's Program Manager makes on-site visits to projects at least once a year and provides technical asistance as needed.

4. Education and Networking. Each year the Foundation conducts a forum for Island Fishery Officers which has included participation by other public and private agencies and seafood distributors.

5. Publication. Information on projects is also disseminated through quarterly progress reports, technical bulletins and final reports.

The Executive Committee, administrative staff and management field personnel of PFDF have been closely involved with fisheries development projects in the U.S. Pacific over the past 15 years.

As a result of having established working relationships in the region, PFDF has learned the strengths and weaknesses of the people in the fishing sector. Fisheries people in the region trust the Foundation and constantly seek advice on fisheries-related problems and guidance on development projects.

The project management arm of PFDF, LMR Fisheries Research, Inc., also handles the catch statistics for the United States tuna purse seine fleet fishing in the cental, south and western Pacific region. In addition, they have conducted numerous studies for U.S. agencies and UNDP/FAO involving fisheries in the Pacific region.

PROGRAM FUNDING AND OUTLOOK

The development activities of PFDF have been authorized by Congress in the Central, Western and South Pacific Fisheries Development Act, which was passed initially as PL 92-444, with subsequent amendments. The latest amendment allowed for $5 million a year to be made available through the Secretary of Commerce. Funding through the Act has never been provided, however, due to the Commerce Department's decision to support Island fisheries needs through the Saltonstall-Kennedy Industry Grant (S-K) Program, which targets the research and development efforts of industry foundations. Since its beginning, PFDF's program has been supported primarily by these S-K funds.

While funding has diminished since 1981, the level of interest in PFDF has not. Each year, Islanders present proposals for $1.5-$2 million in basic projects, although each year only 30% of that request has been provided.

S-K funding itself appears to be in crisis. With no support from the Administration in the last 8 years, this year the level of funding is $4.2 million for new projects nationwide; the distribution of awards will favor Eastern seaboard applicants; and priority areas for support emphasize fisheries management and basic research rather than development. These signs, if they are trends, suggest that S-K support for the Pacific Islands will end after this year. Without an alternate source of funding, PFDF's involvement in Island development will also end.